

**ALTERNATIVE SCENARIOS FOR
FEDERAL TRANSPORTATION POLICY**

VOLUME II

**POLICY REVIEW AND SCENARIO
DEVELOPMENT**



MASTER

FIRST YEAR FINAL REPORT

JANUARY 1977

UNDER CONTRACT: DOT-OS-50239

Document is available to the U. S. Public through
the National Technical Information Service
Springfield, Virginia 22161

Prepared For:

U. S. DEPARTMENT OF TRANSPORTATION
Research and Special Programs Directorate
Transportation Programs Bureau
Washington, D.C. 20590

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

NOTICE

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

1. Report No. DOT-TST-77-79		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle ALTERNATIVE SCENARIOS FOR FEDERAL TRANSPORTATION POLICY - Policy Review and Scenario Development VOLUME II				5. Report Date January 1977	
				6. Performing Organization Code	
7. Author(s) Ann F. Friedlaender, Robert W. Simpson, Richard de Neufville, Ernst Frankel, James Sloss				8. Performing Organization Report No.	
9. Performing Organization Name and Address Massachusetts Institute of Technology Center for Transportation Studies Cambridge, Massachusetts 02139				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. DOT-OS-50239	
12. Sponsoring Agency Name and Address Office of University Research Research and Special Programs Directorate U. S. Department of Transportation Washington, D. C. 20590				13. Type of Report and Period Covered First Year Final Report	
				14. Sponsoring Agency Code DPB-50	
15. Supplementary Notes Technical Monitor: Byron Nupp, TPI-11.1					
16. Abstract The research evaluates the economic effects of existing and prospective federal policies governing intercity and international freight and passenger transportation enterprises in the economy of the United States. The analysis encompasses all modes of transportation, including rail, motor, water, air and intermodal coordinative institutions, and focuses upon the impact of alternative regulatory policies. However, other federal policies including subsidy, taxation, procurement, government ownership and investment, special programs for particular transportation industry problems and impacts of general national policies on transportation will be included when relevant. Economic evaluation includes the study of efficient resource allocation and distributional effects of alternative policies together with consideration of both partial and general equilibrium effects. The research is interdisciplinary in scope, drawing upon engineering, economics, statistics, law and administration. There are four volumes included in this report: Volume I - Summary of First Year Report Volume II - Policy Review and Scenario Development Volume III - An Integrated Policy Model for the Transportation Industries Volume IV - Network Models for Transportation Policy Analysis					
17. Key Words transportation policy regulatory policy interdisciplinary approach federal policy passenger & freight transportation			18. Distribution Statement Document is available to the U. S. Public through the National Technical Information Service, Springfield, Virginia 22161		
19. Security Classif. (of this report) UNCLASSIFIED		20. Security Classif. (of this page) UNCLASSIFIED		21. No. of Pages	22. Price

EB

METRIC CONVERSION FACTORS

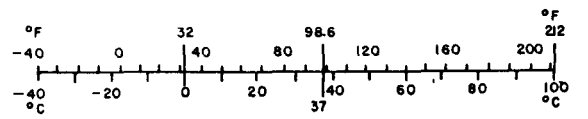
Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
AREA				
in ²	square inches	6.5	square centimeters	cm ²
ft ²	square feet	0.09	square meters	m ²
yd ²	square yards	0.8	square meters	m ²
mi ²	square miles	2.6	square kilometers	km ²
	acres	0.4	hectares	ha
MASS (weight)				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
VOLUME				
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.96	liters	l
gal	gallons	3.8	liters	l
ft ³	cubic feet	0.03	cubic meters	m ³
yd ³	cubic yards	0.76	cubic meters	m ³
TEMPERATURE (exact)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
AREA				
cm ²	square centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	square kilometers	0.4	square miles	mi ²
ha	hectares (10,000 m ²)	2.6	acres	
MASS (weight)				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
VOLUME				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³
TEMPERATURE (exact)				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



*1 in = 2.54 (exactly). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price \$2.25, SD Catalog No. C13.10:286.

ALTERNATIVE SCENARIOS FOR FEDERAL TRANSPORTATION POLICY

Volume II

Policy Review and Scenario Development

Ann F. Friedlaender
Robert W. Simpson
Richard de Neufville
Ernst Frankel
James Sloss

Massachusetts Institute of Technology
Center for Transportation Studies
Cambridge, Massachusetts 02139

January 1977

This work was supported by DOT Office of University Research, Contract No. DOT-OS-50239. We are grateful to George Baker and Patricia Hanratty for research assistance.

ALTERNATIVE SCENARIOS FOR FEDERAL TRANSPORTATION POLICY

Volume II

Policy Review and Scenario Development

Table of Contents

	<u>Page</u>
I. Introduction and Overview	1
II. Federal Transportation Policy	4
III. Scenario Development	62
References	102
Appendix A: Government Control of Rates and Entry in the Rail and Trucking Industries	
Appendix B: Government Control of Rates and Entry in the Air Industry	
Appendix C: Entry, Merger, and Rate Regulation in Inland Water, Shipping, and Pipeline Transportation	

I. Introduction and Overview

The federal government has traditionally played an active and diverse role in domestic transportation. Federal regulatory policies directly affect rates, routes, entry and mergers in the intercity transportation industries: rail, trucking, barge, and air. The federal government largely determines the quantity, quality and costs of the infrastructure in the trucking, barge and air transport industries through its investment and user charge policies. While its role is somewhat less direct, it also affects the quantity and quality of the infrastructure in the railroad industry through its abandonment policies, and, with the establishment of Amtrack and the reorganization of the Northeast railroad into Conrail, is beginning to enter into a new phase of direct subsidy and operations in, at least, rail activities.

In addition to these major promotional and regulatory roles, the federal government undertakes a number of other activities that affect the intercity transportation industries. Energy policy directly affects fuel costs and thus the relative costs of the various intercity modes. In addition, environmental controls affect emissions and noise levels of motor vehicles and aircraft and thus their relative costs. Finally, federal policies with respect to safety, union work roles, and loan guarantees can have substantial impacts upon the transportation industries.

With such a diverse spectrum of activities, it would be surprising if all federal policies were aimed at the same goals or affected all

transportation industries consistently. Indeed, one need only look at the Preamble in the National Transportation Policy of the Transportation Act of 1940, which called for the Interstate Commerce Commission (ICC) "to preserve the inherent advantage of each mode" and the federal funding of the Interstate Highway System and the extensive network of waterways to realize that these policies may often be in direct conflict.

Nevertheless, it is our belief that while regulatory and investment/user charge policies may often pursue overtly conflicting goals, they have a certain rationality when viewed within a somewhat broader perspective of the multiple objectives of the policy maker. By recognizing that federal transportation policy attempts to satisfy a broad range of goals, which themselves may not be entirely consistent, it is usually possible to explain policy action on the basis of implicit or explicit trade-offs among these several objectives.

The recognition that transportation policy is aimed at multiple objectives is obviously important for policy analysis and the development of alternative scenarios for federal transportation policy. If we focus on one objective at the expense of the others, our analysis will obviously be less relevant and useful for policy evaluation than if it had encompassed all of the relevant dimensions. If, for example, policy makers are concerned about issues of equity and the income distribution, they will tend to discount policy evaluations that concentrate on aggregate efficiency impacts of transportation policy. Conversely, however, to the extent that issues of economic efficiency are important to policy makers, analyses that solely consider the income transfers implied by transportation policies will be inadequate. Insofar as

policy makers (whether they be legislators, administrators or even judges) make implicit or explicit trade-offs among various objectives, their actions may appear to be irrational when viewed from the perspective of any single objective. Thus if we are to build models that can be useful for policy evaluation, it is essential that we include the relevant objectives in our analysis. Consequently, this report attempts to identify the major objectives of transportation policy and demonstrate how they can then be incorporated into the analytical models that are being developed for policy analysis.^{1/}

Part II of this report analyzes existing transportation policy and identifies the major goals that transportation policy has tried to meet. Its major argument is that transportation policy has implicitly or explicitly made trade-offs among the various goals encompassed in economic efficiency and various aspects of the income distribution and that it has in fact presented a kind of consistency if not economic rationality.

Part III then indicates how these policy goals can be incorporated into analytical models that quantify the impact of changes in federal transportation policies and develops a number of illustrative scenarios for the air and surface freight industries.

^{1/}For a full description of these models, see Friedlaender et al. (1977), and Simpson et al. (1977).

II. Federal Transportation Policy

As we have indicated above, federal transportation policy includes a diverse number of activities that serve a diverse number of goals. It is the purpose of this section to identify these goals and to indicate the implied trade-offs among these goals. In particular, it is our belief that questions of income gains and losses to specific groups, of industry stability, and of shipper equity have tended to dominate questions of economic efficiency in regard to regulatory and investment policies. Consequently, although measuring the efficiency impacts of transportation policy is an important activity, it will necessarily fail to consider the full dimension of the problem.

This section has four parts. Part A presents the objective of transportation policy in fairly broad terms and indicates the nature of the trade-offs in fairly general terms. Part B then considers current rate policy across modes while Part C considers current policies with respect to operating authority across modes. Part D then provides a brief summary and overview of the trade-offs among all policies that can be related to the policy models, which will be discussed in Section III of this report.

A. Objectives of Federal Transportation Policy

Although federal transportation policies encompass a wide range of activities, regulatory and investment/user charge policies dominate the others in terms of their pervasiveness, the magnitude of their impacts and their political importance. We will consequently focus upon these policies and only discuss other aspects of federal transportation policy when relevant to the objectives contained in economic regulatory and investment policies.

1. The Efficiency Costs of Regulatory and Investment Policies

In recent years, a large literature has developed assessing the impact of federal regulatory policies in terms of economic efficiency.^{2/} While these studies differ in details of methodology and approach, they are remarkably consistent in arguing that present regulatory policies encourage excessive rates and capacity, as compared to the competitive norm. Thus, they argue, in the absence of regulation, rates and capacity could be expected to fall, leading to lower costs, more efficient utilization of resource, increased shipper profits, and consumer satisfaction. The total costs of these inefficiencies have been variously estimated to range between \$5 and \$10 billion.^{3/}

Although the efficiency impacts of investment policies and user charges have received considerably less attention by economists than

^{2/}The seminal work in this area is that of Meyer *et al.* (1959). Subsequent analyses focusing on intercity freight include the Doyle Report (1960), Friedlaender (1969), Moore (1972), Keeler (1976). Studies focusing on the air industry include Jordan (1970), Eads (1972), Keeler (1972), and Douglas and Miller (1974).

^{3/}See, for example, Moore (1972), Keeler (1976), Phillips (1975).

the efficiency aspects of regulatory policies, a number of studies have attempted to assess the federal investment programs in highways and waterways.^{4/} While it is clear that certain highway or waterway investments can be shown to be desirable in terms of the usual cost-benefit criteria, it is equally clear that a large number of them cannot. In this connection, the discussion of the Arkansas River Project in The Doyle Report (pp. 95-96) is instructive:

No evidence was found in the documents examined to indicate that the Arkansas basin area has lacked, now lacks, or in the foreseeable future might lack, adequate transportation services in the absence of this navigational improvement. However, local sponsors of the project stated that they were paying freight rates which were, in general, the highest in the national rate structure, and expressed a belief that development of water transportation on the Arkansas River would relieve this condition. . .

Inclusion of the navigational features in the Arkansas project will, according to latest estimates, cost the general taxpayers more than \$850 million for initial construction, and some \$10 million annually for maintenance and operation. One of the principal justifications given the general public for these [operations] . . . is the possible reduction of certain freight rates. This is indeed an exceedingly costly method of obtaining regional freight rate adjustments in a regulated industry. On this navigation project alone, amortization of the capital investment with interest, coupled with annual charges for maintenance and operation, will be twice as much as the \$20 million appropriated to the ICC in 1961 for nationwide regulation of the several forms of transportation under its jurisdiction.

Moreover, economists have long been unanimous in condemning the absence of any user charge for waterway improvements. Since

^{4/} See, for example, Friedlaender (1965), The Doyle Report (1960).

other modes are either forced to pay user charges for the publicly provided infrastructure (trucks) or are forced to provide it themselves (rail), the lack of any user charge for waterways clearly distorts relative costs in favor of barges. Thus the observed cost differentials that exist among these modes do not reflect true differences in resource costs, but rather artificial differences due to federal investment and pricing policies.

To briefly summarize then, over the past two decades a large and impressive body of literature has developed documenting and quantifying the inefficiencies associated with federal regulatory policies and investment and pricing policies with respect to the transportation industries. Economists are virtually unanimous in believing that present regulatory and investment policies are costly and inefficient; a rationalization of the policies would save consumers and shippers billions of dollars a year in terms of lowered costs and improved service.

If the economics profession has been remarkably consistent in its condemnation of federal regulatory and investment/user charge practices, the political process has been equally remarkably consistent in its unwillingness to change these practices and policies.^{5/} This indicates that other goals served by regulation and investment in infrastructure are given more weight than economic efficiency by the relevant policy makers. Alternatively stated, the behavior

^{5/} The recent passage of the Railroad Regulatory Reform and Revitalization Act (RRRR Act) in 1976 indicates that this may be changing.

of the political process indicates that policy makers have felt that the achievement of these other goals is worth the efficiency costs. Thus the response of the policy makers to the documentation of these costs cannot be called irrational. But it does indicate that economic efficiency must be receiving a very low weight relative to other goals in their objective functions.

2. The Rationale of Regulation

If economic efficiency does not appear to be a major goal of policy makers concerned with transport regulation, it is essential that we identify the major goals, for only by making the trade-off between these alternative goals and economic efficiency explicit can we develop a framework that can be useful for rational policy analysis.

Nevertheless, identification of these goals is made difficult because the American political process tends to make implicit rather than explicit trade-offs and to react to rather ill-defined goals rather than well-defined goals. Thus it is probably impossible to understand present regulatory policy and its evolution without understanding the nature of the political process in the United States.

a. The Politics of Change in the United States

The United States' political system differs sharply from those in other countries such as Britain or France in that there is no central authority that can decide upon the desirability of change and then ensure its implementation. Political power in America is deliberately divided among the various branches of government, between the central government and the States, and between the States themselves. Each of these entities has some power to frustrate, delay and even veto

proposals for change. Thus no regulatory or administrative proposal stands much of a chance of being implemented unless it commands widespread acceptance by most of the interest groups involved in the issue.

Consequently, problems must be widely recognized as legitimate and important if they are to receive serious consideration for resolution in the political process. The policy problems that will command sufficient attention to attain resolution are, thus, those that arise from broadly-based public perceptions of deficiency between what is and what could be. These are the issues that policy makers may feel are worth spending effort and political capital on.

Conversely, policy problems are only rarely, if ever, defined by groups of experts relying solely on their professional standards as to what is right. An economist may see that the regulation of transportation creates inefficiencies. An engineer may find that this same regulation is a barrier to technical innovation. Although both may be correct, little change in policy is likely to result from these observations until public sentiment is sufficiently aroused to motivate the many interest groups to cooperate in doing something about the situation.

While something of an oversimplification, one can argue that changes in regulatory policy only come about in time of crisis in response to widely held views that major change were necessary. Thus the original passage of the Interstate Commerce Act in 1887 was not so much a response to the specific special interests, but instead a response to a wide range of divergent interests that desired

regulation. As Friedlaender (1969, p. 2) has stated:^{6/}

When regulation of railroads was first introduced in 1887, it was widely supported. Small, isolated shippers wanted it to protect them from the monopoly power of the railroads. Western communities wanted it to limit the railroads' heavy-handed exercise of economic power over rates, routes, and the placement of depots. The general public wanted it to control the frequent rate wars, the watered stock, the irresponsible land speculation, and the many bankruptcies and reorganizations. The federal government wanted it to ensure relatively low freight rates on goods coming from the West to encourage the continued settlement and development of this region. The railroads supported it (or at least acquiesced to it) to formalize the existing rate structure and to end the instability created by frequent rate wars. Thus, the Interstate Commerce Act of 1887 and the regulatory structure it established enjoyed wide support. Regulation controlled the monopolistic excesses of the railroads while permitting them to maintain a rate structure that benefited not only the railroads but society.

Similarly, the Transportation Acts of 1935, 1938 and 1940, which respectively introduced the regulation of motor carriers, air carriers and inland water carriers, resulted from attempts to deal with the crises and disruptions caused by the Great Depression. Faced with bankruptcy of many firms, excess capacity and cutthroat competition, the carriers favored regulation which would help control the competitive excesses of the industry and stabilize rates and profits. Shippers favored regulation because it would lead to stability and reduced uncertainty concerning rates. Agricultural interests favored regulation to ensure that the traditional value-of-service rate structure

^{6/} For an elaboration of these views see Buck (1913), Kolko (1965), Benson (1955), Tarbell (1904), MacAvoy (1965).

would be maintained. Thus, again, major changes in regulatory practices only came about when a wide concensus developed that existing practices led to intolerable situations as perceived by broad groups of shippers and carriers.

Even in time of crisis that may engender major institutional changes, however, it is only realistic to expect that these changes will be directed toward the issues of the moment. For example, instead of effecting major changes in the regulatory framework, the Acts of 1935 and 1940 each brought trucking companies and water carriers under regulation, thus leaving the basic structure of regulation unchanged. Consequently, even if major changes in institutional arrangements occur, it is likely that they will do so in a piecemeal fashion instead of by comprehensive legislation that covers all aspects of transport regulation.

The implementation of change in a piecemeal fashion is also consistent with the tendency of the American political process to compromise and accommodate diverse interests. Since change requires the acquiescence of many different groups, explicit efforts must be made to bridge their differences. This desire for accommodation should affect the nature of the proposals that are acceptable for change. Because policy makers attempt to maximize the political acceptability of innovation, they try to structure the legislation to appeal to as many diverse groups as possible.

This desire for compromise and accommodation was evident in the creation of Amtrack and Conrail. Instead of outright nationalization or abandonment of service, Amtrack and Conrail attempt to preserve

service within a private framework. Even though operating companies were formed that belong to the federal government, the autonomy of the private companies was preserved and service was maintained. Although the formation of these companies may well facilitate the eventual nationalization of the rail network and abandonment of service, this change (if it occurs) will necessarily come in a slow and piecemeal fashion. Similarly, although the construction of the Interstate Highway System marked a fundamental departure in policy by providing massive amounts of federal funds for the highway infrastructure, which caused a dramatic change in the relative costs of rail and truck transportation, its significance as transportation legislation was minimized by labeling it as a defense measure.

Since the American political process is based upon compromise and accommodation which often attempts to blur the magnitude and significance of the change, it is usually difficult to identify the key motivations for any piece of regulatory legislature or any important regulatory decision. The preambles or rationales for the documents tend to include all the elements that have any political support. Consequently, the major forces leading to regulatory change generally have to be deduced from their ultimate consequences instead of from the documents themselves.

Moreover, since the political process stresses compromise among conflicting forces, the identification of the major themes that have motivated and shaped transport regulation in the United States is essential if we are to develop politically viable alternatives to the

existing regulatory structure. Without identifying these themes, it is impossible to understand which problems the public will accept as legitimate and, thus, which problems may present a reasonable possibility for effective political action. In short, the major themes motivating the existing regulations must be known by anyone wishing to develop feasible strategies for change.

b. Major Issues

The identification of the major motivations that have led to the existing regulatory structure is difficult, however, since they are not clearly defined by Acts of Congress, the decision of the regulatory agencies, or the rulings of the Courts. As suggested earlier, this lack of clarity of purpose is an expected feature of the American political process. Since our system essentially requires that issues be blurred and compromised, it is necessary to interpret the overall patterns that have emerged over time to determine the principal motivations for regulation.

Nevertheless, examination of the record indicates that policy makers have fairly consistently been concerned with the following issues:

- Fairness
- Support of Rural and Agricultural Interests
- Industry Stability.

Let us consider each of these in turn.

Fairness. The issue of fairness was a major one in the passing of the Interstate Commerce Act of 1887 and has continued to be a dominant theme in subsequent regulatory changes. Prior to the passage of this Act in 1887, the railroad rate structure was characterized by pervasive price discrimination among shippers, localities and commodities. Small-lot shippers and isolated communities with no alternative means of transport were charged rates far in excess of those charged for comparable service where railroads faced competitive pressures. Large volume shippers, communities served by several means of transport or alternative sources of supply generally enjoyed low rates, while the railroads exploited their monopoly power with respect to their captive shippers.

Thus it is not surprising that the bulk of the initial Interstate Commerce Act of 1887 was aimed at the prohibition of discriminatory practices amongst persons and locations. In particular, this Act effectively prohibited the monopoly exploitation of small shippers by requiring that rates be just and reasonable (Section 1), by explicitly prohibiting personal price discrimination (Section 2), undue preferences between persons, localities and type of traffic (Section 3), and the practice of charging more for a short haul than a long haul over a common line (Section 4).

Although the Act has been considerably altered during the ensuing 90 years, virtually no efforts have been made to alter its prohibitions

against personal price discrimination. Indeed, the market dominance provision of the recent RRRR Act can be interpreted as an effort to ensure that discriminatory pricing will not occur as the railroads undertake more flexibility in rate making.

Fairness or nondiscriminatory pricing has also played an important role in the CAB's decisions concerning rate differentials. While it has always been willing to permit rate differentials for service differentials, i.e., rate difference for first-class and economy service, it has been somewhat ambivalent about permitting rate differentials for other classes of service. During the past decade the Board has vacillated between permitting rate differentials for less convenient service (the family excursion plan, the Bicentennial fares, student discounts), and feeling that these differentials were discriminatory and hence unacceptable. Current policy appears to permit rate differentials that are clearly based on service differentials in terms of convenience, but to prohibit differentials that are based on the characteristics of the traveller. Thus Bicentennial fares that force the traveler to fly at certain times and to make reservations in advance are acceptable, while student discounts are not.

In addition, the CAB requires a uniform fare taper or relationship between fare and distance. Thus people flying between Grand Forks, North Dakota and Des Moines, Iowas face essentially the same fare structure as those flying between Boston and Wahsington, D.C., even though the airlines are able to achieve substantial economies of density on the heavily traveled routes. Since rate differentials based on route density would appear discriminatory, even though they would in fact

reflect cost differentials, the CAB has resisted them.

Nevertheless, price discrimination is pervasive in the transportation industries; price-marginal cost ratios differ among different types of commodities and different types of users. The value-of-service rate structure is frankly discriminatory and the cross subsidization of various fares of traffic in the air and surface freight industries is widely recognized and accepted. Thus while considerations of fairness prohibit certain forms of price discrimination, they do not prohibit all of them. It is consequently instructive to analyze the nature of the permissible price discrimination, which will indicate the role that regulatory practices have played in supporting agricultural and rural interests.

Support of Rural and Agricultural Interests. Value-of-service pricing is a key characteristic of the freight rate structure. Under this structure low-value agricultural and bulk commodities are charged low rates relative to costs while high-value manufactured commodities are charged high rates relative to costs. Thus although the Interstate Commerce Act of 1887 prohibited all forms of personal price discrimination, it permitted the retention of a major form of discriminatory pricing in the value-of-service rate structure.

Since the value-of-service rate structure clearly favors rural and agricultural interests, it is entirely consistent with a more general public policy that has tended to favor these interests. Indeed, the support of agricultural and rural interests has been a dominant theme of American political life. Thus just as direct price supports or subsidies can be viewed as vehicles of income maintenance for agricultural and rural groups, so can the transportation policies of the

value-of-service rate structure, the construction of the Interstate Highway System, and the construction of the extensive waterway network with its lack of user charges.

When regulation was initially instituted, the value-of-service rate structure met a number of important goals. It not only made sense as a vehicle for social policy by ensuring low rates on agricultural commodities but also made sense from the point of view of the railroads who could obtain higher profits with a discriminatory rate structure than a nondiscriminatory one. As Friedlaender (1969, p. 16) has argued:

The rate structure that maximized the railroads' profits was also the one that encouraged the development of the West. At that time regulation unquestionably served important social goals and created few, if any, losses in terms of economic efficiency.

Nevertheless, with the growth of truck competition, the value-of-service rate structure was no longer the profit maximizing rate structure. Nelson and Greiner (1965) have argued convincingly that the railroads consistently attempted to raise rates on non-competitive agricultural commodities between the passage of the Transportation Act of 1920, which in principle permitted rate-of-return rate making,^{7/} and the passage of the Transportation Act of 1935, which brought motor carriage under regulatory control. Nevertheless, the ICC consistently

^{7/}The Transportation Act of 1920 established "fair return on fair value" as the rule of rate making to be followed by the ICC.

prevented these rate increases, citing the depressed state of agriculture and the Hoch-Smith resolution of 1925 which gave a clear legislative sanction to the value-of-service rate structure. Indeed, the extension of regulation to motor carriers and water carriers can be interpreted as an effort to maintain the traditional rate structure in the face of competitive pressures that would otherwise have eroded it.

Recent transportation policy also indicates the importance of rural and agricultural interests. With respect to regulatory policies, the ICC has consistently prohibited charges that would tend to undermine the traditional rate structure. To this end, it has insisted that railroads prove that their rates are compensatory and cover long-run marginal costs and hence will not place an undue burden on other traffic. Similarly, the ICC has generally been unwilling to permit the railroads to cut rates to "retain or regain a fair share of [the high-value] traffic," even though the rate is "remunerative."^{8/} Apparently, the ICC feels that such reductions would erode the profitability of the high-value traffic and hence place pressure on the traditional rate structure.

As indicated above, federal investment and user charge policies also seem to be oriented toward agricultural and rural interests. In several cases, high freight rates are explicitly cited as the rationale for construction of inland waterways.^{9/} Moreover, the pro-

^{8/} For a full discussion of these points see Friedlaender (1969), and Appendix I.

^{9/} See, for example, the Doyle Report (1960, p. 95).

cedures used by the Corps of Engineers to measure benefits are frankly related to the railroad rate structure. Since benefits are measured by the differentials between rail rates and barge costs, there is a clear presumption that waterway construction will lead to lower rates to producers of bulk agricultural commodities. Since one of the goals of waterway construction is reduced freight rates, it would thus be counterproductive to impose user charges that would tend to offset these rate reductions. Consequently, the federal investment and user charge policy in waterways has a clear political rationale, if not an economic one.

Although the Interstate Highway System was sold in terms of its general national impacts upon all regions of the country, it seems clear that it has dramatically improved the accessibility of rural areas and reduced, if not eliminated, the latent monopoly power of the railroads with respect to rural and agricultural areas that do not enjoy water competition. While the completion of the urban segments of the Interstate System has often been delayed by excessive costs and local opposition, the rural segments of the System have largely been completed on schedule. Thus virtually all areas of the country now have a viable (if more expensive) alternative to rail transportation.

Whether considerations of the traditional rate structure entered explicitly into the decision-making calculus of the legislative process when the Interstate Highway Act was passed in 1958 is impossible to say. It is clear, however, that by virtually any cost/benefit calculus, much of the rural Interstate System was not economically

justified.^{10/} From this we can only infer that accessibility and low-cost transport to rural areas were viewed as being sufficiently important to merit the construction of a large number of links of questionable merit in terms of economic efficiency.

Finally, the abandonment provisions of the Railroad Revitalization and Reform Act of 1976 also indicate that a concern with rural and agricultural interests still persists. As high-value traffic has increasingly been diverted to trucks at the expense of the railroads (partially due to the lowered trucking costs occasioned by the Interstate Highway System), increasing amounts of rail lines have been subjected to falling traffic densities. Since there is considerable evidence that there are substantial economies of density,^{11/} this means that costs have risen substantially on these lines. Because the railroads are prevented from raising rates on this traffic, either by regulatory controls or by truck or water competition, it is likely that much of this traffic has become uneconomic for the railroad to carry. The rational behavior of the railroads in this situation would be to abandon this traffic. Thus if the railroads were free of all capacity controls, it is likely that they would abandon a substantial amount of their light density lines.

However, the Regulatory Reform and Revitalization Act of 1976 has made abandonment considerably more difficult than it previously has been. Specifically, the Act prevents abandonment in the face of sufficient

^{10/} See, for example, Friedlaender (1965).

^{11/} See, for example, Keeler (1974), Caves and Christenson (1976).

shipper opposition and instead provides modest subsidies for the continuation of service. Since rural and agricultural interests would presumably be the hardest hit by massive abandonment of light-density lines this provision is clearly consistent with the traditional stance in favor of these interests at the expense of urban and suburban interests.

Finally, the structure of air rates has also discriminated in favor of rural areas. While there is a certain amount of controversy concerning the existence of cross subsidies between rural and urban interests in the sense that the airlines actually suffer losses on their light density traffic,^{12/} it is generally agreed that a cross subsidy exists in the sense that rates to rural areas are lower and service is higher than each would be in the absence of regulatory controls. In addition, the Board grants explicit subsidies to local carriers.

The problem facing the airlines is quite similar to that facing the railroads. In both cases, economies of density would dictate a rate structure that was characterized by lower rates on high density traffic characterized by large traffic volumes over a given link. In fact, however, rates for "similar" traffic are the same regardless of the traffic density. Thus the rate structure discriminates in favor of the low density areas since the price-marginal cost ratios they experience are much lower than those associated with high density areas.

In the absence of regulation, it is highly likely that the airlines would either reduce service or raise rates (or both) to low density

^{12/} See, for example, Douglas and Miller (1974), and Eads (1972).

regions to make their returns on this traffic commensurate with the returns to other traffic, particularly since the demand functions of this traffic are probably quite price and service inelastic. This, of course, would not be in the best interests of these rural communities which have enjoyed service on a general parity with other regions. Thus, again we see that regulation has tended to favor these regions.

Im sum, it seems clear that one of the major themes of transportation policy has been the support of rural and agricultural interests. The freight rate structure and the air rate structure clearly discriminate in favor of small communities and rural regions. The federal investment and user charge policies in highways and waterways can largely be explained in terms of a desire to provide alternative sources of transportation to regions that are subject to potential monopoly power on the part of the railroads. The abandonment provisions of the Regulatory Reform and Railroad Revitalization Act of 1976 act to ensure continued rail service to rural regions that generate light traffic density.

Income redistribution from urban and suburban areas to rural and agricultural regions has also been a major theme of American public policy. The farm subsidy, the stockpiling procedure for raw materials, and the tariff structure have all been designed to aid rural and agricultural groups. Thus the income redistribution implicit in the transportation policies concerning rates and infrastructure is entirely consistent with broader policy goals and actions.

This indicates, however, that in the absence of a major shift in public opinion and public policy, any changes in transportation

policy that adversely affect rural and agricultural interests will probably not be politically or socially acceptable.

Industry Stability. While probably somewhat less important than fairness, or support of agricultural and rural interests, the issue of industry stability has consistently been a concern of regulatory authorities. The following quote in the Railway Review of 1886 expresses the general attitude toward stability quite well.^{13/}

The rate wars which have of late years so devastated the finances of the railroad companies, are all inaugurated and carried out upon interstate traffic . . . they introduce elements of chance into the transactions of business. . . In the interests of the producer, transporter and consumer, governmental regulation of inter-state traffic is necessary and desirable. . .

Congress has repeatedly endorsed the notion of price stabilization (or fixing) in transportation. The Transportation Act of 1920 established regulation of minimum rates for railroads and reinforced the railroads' capability to prevent rate wars and set prices. Later, when these practices came under attack under the antitrust laws, Congress exempted them from these statutes through the Reed-Bulwinkle Act of 1948.

More recently, Congress has endorsed the notion of price stability in the surface freight industries in the Transportation Act of 1958 and the RRRR Act of 1976. In the first case, Congress flirted with passing legislation that specifically prohibited umbrella rate-making, under which rates of the low-cost carrier are maintained to protect

^{13/}Quoted in Kolko (1965), p. 40.

the high-cost carrier.^{14/} However, when it became clear that the passage of such legislation would free the railroads to reduce rates to attempt to capture the high-value traffic, Congress retreated from this position.^{15/} The recently passed RRRR Act is rather ambiguous on this point. Although it does permit railroads to charge rates within a seven percent band, it can prevent these changes in the face of market dominance, which presumably means situations in which such rate reductions would hurt competitors. Thus concerns with industry and market stability still appear to be very strong.

Generally, the regulatory agencies have consistently acted to preserve the status quo and to maintain threatened firms or industries. The Civil Aeronautics Board has consistently attempted to save specific airlines firms from collapse by giving troubled airlines advantageous routes.^{16/} When all else fails, the Board arranges rescuing mergers, as it did between Capitol and United and between Northeast and Delta. Similarly, the Interstate Commerce Commission carefully examines proposed railroad rates to see if they might lead to "destructive competition" and impose a risk of driving a competitor or competing mode out of business.^{17/}

^{14/}For a full discussion of this see Friendly (1962).

^{15/}This retreat could also be interpreted as an effort to maintain the traditional rate structure.

^{16/}For example, the CAB gave Northwestern lucrative routes to Florida and California. It also arranged route exchanges between TWA and Pan American to bolster their international operations.

^{17/}For a full discussion of these points see Appendix A.

The ICC has also been extremely reluctant to grant certification of entry to motor carriers in new markets. Even if existing shippers argue that existing service is inadequate, the Commission will generally refuse to grant a new certificate in the face of opposition from existing carriers.^{18/}

The way in which regulatory agencies respond to innovations further illustrates their desire to prevent rapid dislocations. It takes years for them to incorporate threatening new technology into the pattern of service. The Interstate Commerce Commission, for instance, long resisted the introduction of the "Big John" railroad cars. This was only accomplished after protracted legal maneuvers which eventually permitted the railroads to operate these cars, but only under conditions that prevented the railroads from fully exploiting their economic advantage. Difficult as it is for existing modes of transportation to introduce new technology, it appears even more difficult for new modes to gain recognition. The nonscheduled airlines in the United States have, for example, been trying for decades to inaugurate the kind of charter services so common in Europe. The Civil Aeronautics Board has resisted these proposals and today similarly resists the proposals of Federal Express to provide all-cargo service.

It is clear, however, that the carriers are as anxious to maintain stability as the regulatory agencies and Congress. Proposals for deregulation have consistently met opposition from the various modes.

^{18/} For a full discussion of this point see Fulda (1961), Williamson (1958), and Appendix A.

The trucking industry is unanimous in its condemnation of regulatory reform that would ease present restrictions concerning rates and entry in the trucking industry. The airlines have consistently voiced strong opposition to the deregulation of airline fares. They assert that deregulation would encourage airlines to desert routes during off-seasons when traffic is low, thus failing to provide adequate service to the public. Although the airlines are ostensibly complaining on behalf of their passengers, the lack of concern about deregulation from consumer groups--indeed, their general endorsement of this proposal--leads one to suspect that the airlines are really concerned about instabilities they themselves might encounter.

This concern with stability on the part of Congress, the regulatory agencies, and the carriers has prompted numerous critics to argue that regulation is really aimed at cartelization of the industry.^{19/} Thus, it is argued, regulation does not really serve the public interest, but the interests of the regulated industry.

While being outwardly appealing, this argument is probably too simplistic. Although regulation does indeed increase the stability of the regulated carriers, it also ensures the other goals of fairness and support of rural and agricultural interests, which are also benefited by industry stability. Since, for example, instability with respect to rates of entry could threaten the traditional rate structure or encourage the industry to attempt new and novel ways of price discrimina-

^{19/} See, for example, Huntington (1952).

tion, it appears that the other two goals are entirely consistent with industry stability. Indeed, present regulatory practices are such as to ensure that the goals of fairness, support for agricultural and rural interests, and industry stability generally act in harmony.

Economic Efficiency. While these three goals are generally consistent with each other, it should be clear that they are not generally consistent with economic efficiency. The efficiency costs of regulation have been extensively documented elsewhere.^{20/} Thus we need only summarize what should by now be a well-known argument.

With respect to intercity freight transportation, it is generally agreed that present regulatory practices encourage excess capacity and an inefficient rate structure. Specifically, because the railroads are constrained from abandoning their unprofitable track, they are forced to operate along an inefficient short-run cost curve instead of an efficient long-run cost curve. Since the railroad trackage was built for volumes far in excess of those that exist now, a rationalization of the railroad roadbed could lead to annual savings of \$2 to \$3 billion.^{21/} Moreover, because of the rate differentials between high-valued manufactured commodities and low-valued bulk commodities, society incurs a dead weight loss of approximately \$500 million. Thus, it is argued a rationalization of the rate structure in conjunction

^{20/} See, for example, Meyer *et al.* (1959), Friedlaender (1969), Moore (1972), Keeler (1974, 1976), Jordan (1970), Eads (1972), Douglas and Miller (1974).

^{21/} For a full discussion see Keeler (1974) and Friedlaender (1972).

with appropriate abandonment could lead to annual resource savings in excess of \$3 billion.^{22/}

Regulation also encourages excess capacity in the air and trucking industry. Although regulatory authorities control the rate structure, they fail to control the level of service or number of vehicles utilized by any given firm. Since firms believe that their market share is associated with frequency of service, they have an incentive to offer more trips. Thus firms will tend to provide excess capacity and eliminate the potential profits associated with the regulated rate. Consequently, service and capacity will be directly linked to the regulated rates. Since the regulated rates are greater than those expected under competition, capacity is also greater than that expected under competition. Consequently, regulation not only imposes a dead weight loss from the rate structure, but also imposes a capacity cost. In a deregulated environment, it is likely that air and trucking rates would be lower and that there would be less excess capacity.^{23/}

Finally, it is well documented^{24/} that investment and user charge policies are inefficient. With respect to investments, a large number of inland waterways and links on the Interstate Highway System have been shown to be uneconomic in terms of the usual cost-benefit criteria. With regard to user charges, it is generally agreed that the lack of

^{22/} See Keeler (1976).

^{23/} See Douglas and Miller (1974) for a full discussion of these points.

^{24/} See Friedlaender (1965), Meyer et al. (1969), The Doyle Report (1960).

user charges on inland waterways distorts relative costs in favor of barges. Moreover, there is some evidence that heavy diesel trucks do not pay their full share of highway costs. Consequently, the private costs of barge and trucking activities fail to reflect their true social costs.

Since the present regulatory and investment policies appear to impose a considerable efficiency cost upon society, we can only infer that the attainment of the goals of fairness, support of agricultural and rural interests, and industry stability are thought to be worth these efficiency costs. Thus the issue facing regulatory and investment policy is not so much whether it leads to efficiency costs, but whether the attainment of these goals is deemed sufficiently important to warrant the present magnitude of these efficiency costs. Alternatively, we can also ask whether new institutional arrangements could be found that would reduce these efficiency costs while permitting the achievement of the other goals.

Before turning to these issues, however, it is useful to consider the present implementation of regulatory policy with respect to rates and operating authority in some detail. This is the subject matter of the next two sections.

B. A Cross Modal Comparison of Rate Regulation

1. General Policy Goals and Rate-Making Principles

Since the Preamble of the Transportation Act of 1940 still presents the basic policy framework concerning regulation of the surface freight modes, it may be useful to review it briefly. This policy statement called for the Commission to:

"provide for fair and impartial regulation of all transport;

"preserve the inherent advantages of each mode;

"promote safe, adequate economic and efficient service;

"foster sound economic conditions in transportation;"

establish and maintain "reasonable charges for transportation services, without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices;"

cooperate with States and State officials;

"encourage fair wages and equitable conditions."

The Act then proceeded to attempt to place the regulation of rail, motor, water and pipelines on a consistent basis under the jurisdiction of the ICC.

The Civil Aeronautics Act of 1938 placed air transportation under the regulation of the Civil Aeronautics Board. This Act also contained a statement of air transportation policy and called for:

"encouragement and development of an air transportation system adapted to meet present and future needs of freight and domestic commerce, postal service and national defense;

"regulation of air transport to recognize and preserve the inherent advantages, to assume the highest degree of safety, to foster sound economic conditions;

"promotion of adequate, economical, efficient air service at reasonable charges, without unjust discrimination, undue preferences or advantages, and unfair destructive competitive practices;

"competition to the extent necessary."

International air transport is also covered by the CAA Act of 1938 (later modified to become the Federal Aviation Act of 1958), while international shipping derives from Merchant Marine Acts of 1936 and 1970 and is under the jurisdiction of the Federal Maritime Commission.

In all these legislative acts, the question of fairness appears to be paramount. For example, each Act contains a general proviso that public tariffs should exist so that all market participants-- carriers, shippers and the general public--will be fully informed of the conditions of service and prices existing in all transportation markets. These tariffs are required to be adhered to by carriers and shippers with no rebating.

Furthermore, each Act contains general principles against any personal and locational price discrimination. Once posted, the tariff is public in the sense that the carriers are obliged to offer it to everyone who requests exactly the transportation services described by the tariff. The tariff may cover a wide set of markets and/or a general class of commodities. It provides a basis for comparison with similar tariffs in other markets and for other similar commodities where the costs of providing the service may not be the same, and where the quality of service may be different. Thus, there is a conflict between creating a classification system which provides uniform, average prices for a wider class of commodities in a wider set of markets (perhaps in some geographic region of the country), and the posting of individual tariffs for a specific commodity (and implicitly perhaps one shipper) in a specific point-to-point market.

A shipper or passenger may claim "unjust discrimination" or "undue preference" based on a tariff in another market, and attempt to obtain "just and reasonable" tariffs covering similar services supplied by the particular carriers in his markets. Thus, the filing of a tariff by a monopoly carrier in a given market may have implications for a wide set of markets and other carriers. Consequently, rate bureaus, shipping or air transport conferences are widely used in which carriers agree upon tariffs over the wider set of related markets that they serve. Notice that prices are not determined independently on a market-by-market basis, but that there is a strong interdependence between individual transportation market prices.

As we have indicated earlier, this desire to maintain nondiscriminatory prices is often in fact discriminatory. If the costs of serving light density traffic are substantially greater than those of serving high density traffic, economic efficiency would dictate rate differentials between these two kinds of traffic. Nevertheless, questions of fairness or equity appear to dictate that individuals demanding similar service be treated equally. This means, of course, that small lot shippers are charged the same rate as large lot shippers,^{25/} and that air passengers flying between two rural cities pay the same fare for a comparable length of haul as air passengers flying between two major urban centers.

^{25/} However, freight class rates provide rate variations with shipment size, and unit train rates do permit some variations with respect to volume of shipment.

Although this rate structure may in fact be discriminatory since it implies that high density traffic has a much higher price-marginal cost ratio than low density traffic, it is important to realize that this rate structure is generally considered to be nondiscriminatory. The notion that passengers or shippers who are utilizing identical services (i.e., carload or economy air) for identical commodities and identical lengths of haul should be charged identical rates is deeply ingrained in the legislative and regulatory rulings. Hence the basic notion of "fairness" and equity will probably have to change before much rate differentiation on the basis of traffic volume is to be permitted.

2. Maximum Rate Control--Protecting the Consumers

Maximum rate control can arise in two distinct, but related circumstances. The first case relates to specific cases of monopoly exploitation where a given rate is found to be excessive when compared to other rates for comparable service. This form of maximum rate control ensures that the rate structure is "fair and equitable" and effectively prevents carriers from exercising potential monopoly power in any given situation in which they might have an opportunity to do so. The second circumstance arises in rate-of-return regulation, under which a regulated industry is permitted to achieve no more than a normal return to capital.^{26/} In this case, the regulatory authority limits general rate increases to prevent "excessive" profits. Consequently,

^{26/} The implications of rate-of-return regulation are the subject of a voluminous literature. For a good summary of the issues involved see Bailey (1974).

maximum rate regulation is generally aimed at specific rates in the first case and general rates in the second.

The ICC has generally been concerned with maximum rate regulation to prevent monopoly exploitation on the part of the railroads. Thus the initial ICC Act in 1887 provided that consumers could complain to the ICC about excessive railroad rates, and that the ICC upon finding them excessive could rule them illegal. It was not until the Hepburn Act of 1906, however, that the ICC was given the power to prescribe maximum rail rates upon complaint about existing rates.

In fact, the issue of maximum rates has not been particularly important. In recent years truck competition and water competition have effectively prevented the railroads from raising rates excessively on high-valued commodities or water-competitive bulk commodities. While regulation has doubtless ensured that the railroads have maintained low rates on noncompetitive bulk commodities, rate increases on these commodities have seldom been subject to litigation or suspension under the maximum rate provisions. Presumably, the strictures concerning "fair and equitable" rates are so ingrained that the railroads feel that it would be senseless to attempt to raise rates on noncompetitive bulk traffic. Nevertheless, the "market dominance" provision of the RRRR Act, which permits the Commission to suspend rate increases if the railroads have "market dominance" clearly indicates that the latent monopoly power of the railroads continues to be an area of concern. Thus it appears to be doubtful whether sufficient regulatory reform will ever exist to give the railroads the freedom to raise rates on their

captive traffic.^{27/}

Maximum rate regulation has never been an issue with motor carriers or water carriers in view of the competitive structure of these industries. Thus regulated motor common carriers face competition from rail, contract carriers, exempt carriage, and private trucking, while regulated water carriers face competition from rail and private water transportation.^{28/}

The Transportation Act of 1920 instituted rate-of-return regulation in the railroad industry by prescribing a "fair return for fair value" such that the industry would be allowed a 5.75 percent return on investment, with a recoupment clause of one half of any earnings over 6 percent into a railroad trust fund to be used for loans to indigent railroads. In succeeding years, however, the rail industry never reached that level of return, and the ICC never really applied the fair return criteria before it was abandoned in the Emergency Transportation Act of 1933. This Act substituted the phrase "need for revenues sufficient to enable carriers under honest, economical and efficient management to provide such service." This phrase has been the only guidance given by Congress to the ICC in establishing general maximum rail rate levels since that time. With the passage of the RRRR Act in 1976, a "no suspend" zone has been established where the ICC cannot prevent annual rail rate increases (or decreases) of up to 15 percent

^{27/} Even if this freedom were granted, it is likely that the antitrust laws would prevent the railroads or other carriers from exercising latent monopoly power.

^{28/} Shipment by unregulated trucking and water carriage far exceeds shipments by regulated carriers in these industries.

declared by railroads. (This zone is phased from 7 percent to 15 percent in 3 years.) Also this Act allows any rate increase where rates are shown to be below "incremental costs." Nevertheless, in view of the railroads' poor earnings record, it is unlikely whether rate-of-return regulation will ever become an issue with the railroads. Indeed, the problem facing the railroads is to ensure that they can obtain "normal" profits rather than preventing them from obtaining excessive profits.

Although the trucking industry is not subject to overt rate-of-return regulation, the ICC does exercise the industry's "Operating Ratio" as a measure of the margin of revenue over operating expenses in deciding general rate levels which ensure that operating expenses are met. Nevertheless, no clear prescription for an appropriate criterion for operating ratio has been made.^{29/} Since, however, the Commission does appear to utilize some form of "operating-ratio" regulation in determining the advisability of general rate increases, more attention should be paid to this form of regulation.^{30/}

Unlike the other regulated modes, the air industry is subject to a well established rate-of-return standard. For air passenger transportation, a uniform structure of tariffs for standard services based on interairport distances has been established. It is a cost-based

^{29/} Appendix A provides examples of various ambiguous statements by the ICC concerning factors and to evaluate the desirability of a general rate increase.

^{30/} For an initial step in this direction, see Cherry (1975).

structure which uses system average costs, a specified rate of return and a standard load factor to determine a precise level of actual or sometimes maximum rates. Elaborate specifications exist for determining an "allowable" investment base. For trunk airlines, the current load factor standard is 55 percent and the target rate of return on investment is 12.0 percent. Currently, airlines use quarterly data on rising costs, etc. to file for automatic small rate increases for the industry much in the fashion of public utilities. Not all carriers have elected to file actual rates with every increase in the maximum rate.

Air freight rates more closely resemble the rate structure for surface freight. Since they generally are the highest rates, there has been very little control over maximum rates. There has been a Domestic Air Freight Investigation, 1970, and a set of recommendations is now before the CAB.

Rate regulation for pipeline transportation presents a quite different situation from the other modes. The transportation function is almost an integral part of the distribution process for the oil and natural gas industries. In fact, the FPC controls natural gas pipelines and only controls "wellhead" prices, not transport charges. However, the ICC does control petroleum and other types of pipelines. maximum rates are based on a 7 percent return on investment for the pipeline company.

3. Minimum Rate Control--Protecting the Carriers

Minimum rate controls have been exercised by both the ICC and the CAB to ensure industry stability, prevent locational price discrimina-

tion, and to ensure the continuation of the traditional rate structure.

Powers over minimum rail rates were given to the ICC by the Transportation Act of 1920 to help stop rate wars between railroads and to ensure that rates were "compensatory" when exceptions to the Long Haul/Short Haul clause were granted for competitive reasons. As competition from both barge and truck grew, the issue of controlling minimum rail rates increased in importance. The Transportation Act of 1940 tried to limit consideration of the effect of new rates to the effect upon movement of traffic by the mode proposing the new rates and placed the burden of proof for the justification of these new rates on the proposing mode. When railroads found they still could not obtain lower, competitive rates, a second attempt was made in the Transportation Act of 1958 which declared that "minimum rates of a given carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving consideration to the objectives of the national transportation policy." This again failed to allow rail rates to be competitive in all circumstances. It is interesting to note, however, that the RRRR Act of 1976 has explicitly stated that any rail rate shown to be above variable cost is just and reasonable. Thus the railroads have a clear legislative sanction to lower prices down to this level.

It should be obvious that controls over minimum rates are entirely consistent, and in fact necessary, for the attainment of the goals of equity, rural support, and industry stability. If, for example, the railroads lowered their rates below long-run marginal cost in an effort to meet water competition, shippers in areas without water

competition would doubtless argue that they were subject to unjust discrimination. Similarly, rates below long-run marginal costs would undermine profitability and hence the stability of the industry. Finally, excessive losses on water-competitive traffic could tempt the railroads to raise rates on noncompetitive bulk traffic, which would, of course, be in conflict with the maintenance of the traditional rate structure.

For all of these reasons, the Commission has been quite strict in enforcing the minimum rate provisions of the regulatory Acts. Nevertheless, it has generally permitted rates to fall to variable cost, which is roughly equivalent to long-run marginal cost.^{31/} Since the rate structure is fundamentally discriminatory, flexibility in setting rates down to long-run marginal cost is essential. Because rates below long-run marginal cost might place an excessive strain upon the system, however, the Commission has failed to grant reductions to meet competitive pressures if this would necessitate pricing below long-run marginal cost.

Minimum rate control has not been an important issue in the trucking industry. Nevertheless, the Commission has on occasion controlled minimum rates of common carrier trucking to prevent rate wars in times of excess capacity, to prevent extremely low backhaul rates, and to protect common carrier trucking from low contract rates. Here the policy seems to have been to accept estimates of variable cost as a

^{31/} However, there is considerable evidence that the ICC's costing techniques do not guarantee that variable cost will bear any quantitative relationship to long-run marginal cost on any given shipment.

lower limit on rates, although in one case (340 ICC 51) the ICC stated that the complete revenues from a round trip must cover costs, which theoretically allows the rates charged one way to be below variable costs.

For contract trucking, the ICC has stated that contract rates can be below existing common carrier rates but that they must be compensatory. Since the ICC does not always have knowledge about the variable costs of contract truckers, especially when owner-operators are involved, it has also stated (314 ICC 28) that there is no basis for distinguishing between compensatory rates for common and contract truckers.

Water contract carriers are subject to minimum rate control, but it does not seem to have been exercised due to the extensive competition from unregulated, exempt carriers and private carriers.

After certification of all cargo air carriers, the CAB did issue minimum air freight rates in 1948 to prevent the ensuing by-product pricing practices by the larger combination passenger-freight carriers. This was revoked in 1961 with the statement that it was no longer necessary. For air passenger service, the CAB also issued minimum rates upon the introduction of coach service in the late 1940's. It also proved to be unnecessary and quickly disappeared.

4. Exemptions from Rate Regulation

Certain major classes of traffic, and certain carriers, are exempt from rate regulation in interstate commerce. This has had a profound effect upon rate regulation of similar traffic and carriers.

For railroads all rates for all commodities are under the control of the ICC. For trucks, there are a number of major exemptions which

cover more than 60 percent of actual ton-miles moved. By ownership, trucks owned and operated by farmers may move commodities to and from the farm. For farm cooperatives, trucks are similarly exempted for agricultural commodities and supplies, and may perform other non-farm related transportation up to 15 percent of their total annual ton mileage. Private carriage is widespread, with the restriction that the truck transportation must be incidental to the firm's main business, and carriage for affiliated firms in a conglomerate is not allowed. By commodity, all nonprocessed agricultural and fishery commodities are exempt from rate regulation. Even regulated common carriers are exempt for a complete truckload of such commodities. This has provided a major source of backhaul traffic for common and contract carriers and is a prime traffic for owner-operators. Also, trucks used exclusively to distribute newspapers are exempt from rate regulation.

For water carriers, the exemptions cover more than 85 percent of the actual ton-miles performed. The Transportation Act of 1940, which purported to bring the water carriers under regulation, exempted bulk commodities for inland and coastal shipping traffic. Thus, the major barge commodities such as grain, ore, coal, aluminum, phosphate, etc. are not under rate regulation. If these commodities move through the Panama Canal, rate regulation does apply. Great Lakes traffic remains exempt, providing that no more than three different bulk commodities are carried simultaneously. Also, the Act states that there can be no mixing of exempt and nonexempt commodities on a barge tow if the exemption is to be maintained. Furthermore, liquid bulk commodities carried

in special tanker vessels are exempt. Thus, coastal shipping of oil moves free of rate regulation.

The exemption of agricultural commodities from trucking regulation and the exemption of bulk commodities from water regulation are entirely consistent with the goals of fairness and rural income support. As we have indicated earlier, monopoly exploitation of rural and agricultural areas was one of the primary motivations in instituting regulation. Thus the agricultural and bulk commodity exemptions can be viewed as efforts to ensure alternative forms of transport to rural and agricultural areas and thus provide a check to the latent monopoly power of the railroads. Furthermore, the agricultural and bulk commodity exemptions are entirely consistent with efforts to maintain the traditional rate structure since they act to keep rates on these commodities low by providing alternative transport services.

At the discretion of the ICC, water transport within a harbor may be exempted, and water contract carriers of "noncompetitive bulk" traffic may similarly be exempted. Private carriage by water is of major importance, and the ICC has even granted permits or certificates to such carriers to transport goods for hire, i.e., to act as contract common carriers for other shippers along their water routes while remaining classified as a private carrier.

For pipelines, the ICC has exempted the private carriage of oil by a producer from the oil fields to its refinery.

For air transportation, almost all public transportation is covered by rate regulation. The CAB has the power to classify carriers and to exempt them. It has done so for air taxi operators, and for scheduled

air taxi (or commuter carriers) who use planes of less than 30 seats. Private carriage may exist, and is exempt from rate regulation.

5. Long Haul/Short Haul Pricing

The long haul/short haul clause was one of the underpinnings of the original Interstate Commerce Act of 1887 and clearly represents an effort to ensure "fairness and equity" in the pricing structure. The long haul/short haul rule states that no point along a given route can be charged more than a further point on the route, unless the ICC declares an exemption.

This rule applies to all rail rates, and any exceptions granted by the ICC must be compensatory to the railroad. It also applies to water, but apparently has not been of much significance. For air, the rate structure is based on a great circle distance from airport to airport, and if declared joint rates cause some long haul/short haul discrepancies, there may be some grouping of airports for a common rate.

For trucking, the long haul/short haul rule does not apply, and rates declared for common carrier shipments by one or more rate bureaus do contain instances where it costs more to ship a shorter distance than a longer distance.

Nevertheless, the notion that intermediate points cannot be charged a rate higher than the rate between the terminal points is fundamental. Thus any regulatory change that proposed relaxation of the long haul/short haul rule would doubtless engender considerable political opposition. Locational price discrimination appears to be prohibited by generally accepted notions of fairness and equity.

To summarize briefly, the regulatory attitudes of both the Commission

and the Board toward rate competition generally indicate consistent support for the goals of equity, rural support, and industry stability. In particular, their specific rate policies have stressed the prohibition of monopolistic price discrimination with respect to specific shippers or locations and the prohibition of competitive pricing policies that would tend to erode the financial viability of existing carriers. Similarly, their policies have encouraged the maintenance of a rate structure that keeps light density areas on a parity with high density areas and the maintenance of the value-of-service rate structure.

It is interesting to note that unlike most regulated industries, rate-of-return regulation has not been employed in the surface freight industries. While this can partly be explained by the lack of profitability of the railroads, and hence the lack of need for profit constraints, it can also be explained by its lack of consistency with the traditional rate structure. Since rate-of-return regulation would free the railroads from the maintenance of any specific rate structure, it is unlikely that they would find that their profit maximizing rate structure, albeit constrained, would be the value-of-service rate structure. To compete with trucking, the rates on high valued goods would be decreased while general rate increases to obtain a specified rate of return would then begin to increase rates for low valued commodities. As Nelson and Greiner (1965) have indicated, when this became apparent shortly after the passage of the Transportation Act of 1920, Congress and the Commission backed away from rate-of-return regulation.

Nevertheless, this form of regulation is used in the airline

industry. Although rate-of-return regulation is generally defended on the grounds that it curbs the exploitation and inefficiencies of monopoly, it has been convincingly demonstrated that it also creates definite distortions and efficiency costs upon society.^{32/} Thus it also implies a trade-off between economic efficiency and other goals of equity or fairness. Consequently, like value-of-service pricing, rate-of-return regulation has been used to achieve goals other than economic efficiency.

C. Policies Toward Operating Authority

The regulatory agencies not only exercise substantial controls over rates, but also over entry, merger and abandonments in the regulated transportation industries. While the issue of fairness and equity was dominant with respect to rate regulation, the issue of industry stability appears to be dominant with respect to the regulation of operating authority. Nevertheless, the desire to support rural and agricultural interests has also played an important role in the specification and implementation of policies concerned with operating authority.

1. General Regulation and Policy

There are four distinct roles which can be identified for participants in transportation: shipper, carrier, operator and owner. The shipper (or passenger) is a consumer of transportation services in a given market. A carrier is a supplier of "transportation services" and is responsible for loading the vehicles and carries the risk of safe delivery. An operator provides "operating services" by operating

^{32/} For a good summary of this literature see Bailey (1974).

the vehicles and other components of the transportation system. An owner has invested in one or more of these operating components. In the U.S. all four roles are subject to some degree of regulatory control over their activities depending upon the mode of transportation.

These four roles may be combined in several ways to create different forms of market operation in transportation. Let us consider the alternatives for a shipper. He may decide to fill all four roles himself--let us call this self-transportation; or he may lease the usage of vehicles and other components of the transportation system from their owners--let us call this charter transportation; or he may hire the vehicles and their operator, i.e., hire operating services which provide his specific needs as a shipper and carrier--let us call this contract transportation.

All of the above forms of shipper-determined market operations may be called private transportation since the shipper is also acting as carrier and is negotiating a private contract for operating services or the lease of system components. Notice that the phrase private transportation is normally used to describe what has been defined here as self-transportation. We assume that the shipper-carrier specifies the services to be performed and bears the risk of safe delivery.

We now consider the alternatives for a public or common carrier, who markets a given set of transportation services to the general public, and retains commercial control over the transportation operations. He may fill all three roles as carrier, operator and owner--let us call this combination a transportation firm; or he may lease the usage of

vehicles, terminals, ways, etc. from their owners--let us call this combination a carrier-operator; or he may hire operating services to meet his specified needs--let us call this combination simply a carrier. We assume in all the above cases that the carrier bears the risk of safe delivery, hires operating services which he specifies, and controls the loading of vehicles. A transportation broker may also exist fulfilling yet another role as an agent between shippers and carriers. (We shall ignore agents or brokers who may exist at every interface of the four roles we have defined.)

All these forms may be described as public transportation since the carrier assumes the risk of safe delivery, specifies transportation services to be performed and their prices in the form of public tariffs, and uses a ticket or waybill as a public contract between himself and any member of the general public.

The authority to supply public transportation services is granted to "common carriers" in the U.S. by a "certificate of public convenience and necessity." This certificate obligates the common carrier to provide specified types of transportation service in a market on a regular basis in response to all reasonable requests from shippers or passengers. It is granted when there is a public need to foster commerce between market regions, and particularly to ensure the existence of transportation service for small and irregular shippers.

The authority to supply operating services for contract transportation is granted to commercial transportation operators in the U.S. by a "permit." This permit allows an operator to enter into private

contractual agreements with an individual shipper/carrier to provide specific kinds of operating services in a market. It provides an alternative to public transportation for large shippers in a market, and thus may have an impact upon the economic viability and quality of service supplied by public transportation.

The authority to supply the usage of transportation vehicles and other system components is not generally regulated in the U.S. Only in Part III of the ICC Act, which describes water transportation, are "vessel furnishers" classified as carriers, and then are specifically declared in Section 302(e) eligible for exemption from ICC control unless it is found necessary to regulate them to accomplish the goals of national transportation policy.

The authority to perform self-transportation is a right freely granted to all U.S. citizens with one exception. Railroads are restricted from owning or operating competing modes by the Hepburn Act of 1906. This was clearly established to prevent their monopolization of transportation service. Although this ownership prohibition doubtless made sense in the early Twentieth Century, there is considerable controversy concerning its present desirability, in view of the need to place the railroads on viable financial footing.

2. Administration of Operating Authority

This section will briefly describe the details of administrative control over the operating authority of the various kinds of carriers and operators in the several modes. We define a transportation market as existing between a pair of points, and a route as a specified path between several points.

Common Carriers--Rail, Truck, Water, Pipeline, Air. For railroads, operating authority exists in all the markets defined by any pair of points on its rail network. The only restriction is that shippers may specify the routing of their shipments. In order to expand the rail network, the ICC must issue a certificate of public convenience and necessity for the construction of any rail line.

For common carrier trucking of general commodities a certificate of public convenience and necessity usually specifies that service will be provided between a pair of points along a specified highway routing. It then adds directional markets to the authority by specifically adding intermediate and offroute points where pickup and/or delivery may occur. This is called a "regular" route authority. For a certificate which is restricted to a special commodity, another form of operating authority called an "irregular" route authority exists. It takes two forms: a radial authority where service is authorized between one specific point and all other points within a given area (this allows a complete set of services for a given industrial plant either outbound or inbound); and an area authority which authorizes service between all pairs of points within a given area.

For all trucking operating authorities, there are a wide set of detailed restrictions that have been used to limit the scope of services which can be provided in a market. A specific commodity, or class of commodities may be authorized or excluded. The type of equipment which can be used may be specified (dump trucks, reefers, vans, etc.). The type of operation may be specified (e.g., truckload only, pickup only, delivery only, one direction service). The type of shipment may

be restricted by container, or by geographic classification, i.e., foreign or interstate traffic. Since these restrictions severely limit interfirm competition in the trucking industry, it is generally agreed that they are aimed at stabilizing the industry and preventing excessive competition.^{33/} Whether the public interest is actually served by these prohibitions is, of course, problematical.

For common carrier water transportation, the operating authority is defined by describing a route authority within a waterway system. Any extension of the waterway (by dredging or lock building) is considered to automatically extend the operating authority of the existing carriers upon their application. Service is authorized between any two points on the waterway system. The authority may specify freighting (towing own barges) or towing (towboat only), or both.

For pipeline transportation, the Hepburn Act of 1906 brought the interstate transportation of all commodities except water and gas under the regulation of the ICC as common carriers. An integrated oil company that only carried oil it produced to its own refinery could remain a private carrier, but it could not buy the oil at the wellhead. Thus, these integrated companies were forced to accept shipments from smaller independent oil producers and refiners with a minimum "tender" of 10,000 barrels determined by later ICC actions. There is, however, no certificate or permit granted, and no control over the construction of new lines or extensions. The scope of the operating authority is

^{33/} See, for example, Fulda (1961).

thus unlimited. Powers of eminent domain are granted by states which may require that the pipeline be a common carrier.

For common carrier air transportation, the certificate of public convenience and necessity contains a route authority which authorizes service between all points along the route unless specifically deleted. Restrictions by type of equipment, or related to routing and scheduling of vehicles are explicitly not allowed.

Contract Operators--Truck, Water, Air. There are no permits issued at present for contract operators in rail transportation, although some special tariffs for unit trains and coal contain longer term contractual conditions to qualify for lower rates.

For contract transportation, operators are issued a permit "in the public interest" and "consistent with national transportation policy" if they are "fit, willing and able." These specify an irregular route authority, and usually specify a given commodity (or class) and full-vehicle operations. The ICC has restricted the number of contracts which can be held under a single trading permit to less than seven.

For contract water transportation, permits are issued to operators on a given waterway system. There is no restriction as to the number of contracts under one permit.

For air transportation, the CAB has issued a certificate of public convenience and necessity to "supplemental" air carriers to engage in charter of passenger transportation. A contract between the air transport operator and the charter operator (who is acting as a broker or indirect air carrier in this instance) must be filed with the CAB. There is no limit to the number of contracts permitted. In addition, there

are a large number of commercial operators of small aircraft (non-scheduled air taxi) that may operate under contracts through a general exemption by the CAB, and a single contract operator of freight (Zantop) which uses large aircraft to haul freight for the automobile industry and which operates under a specific exemption.

Dual Authority--Truck, Water, Air. When a single firm simultaneously holds both a certificate and a permit to provide transportation and operating services, it creates an opportunity for discrimination among shippers. The firm may enter into contracts with larger shippers to provide lower cost service which is available to smaller shippers only at common carrier rates. While this is not an issue in rail transport where operating permits do currently exist, Parts II and III for motor and water carriers specifically prohibit dual operations unless the ICC finds it to be in the public interest and consistent with national transportation policy. As a result, trucking firms do occasionally hold certificates and permits that are not for the same traffic or market areas. Similarly, water carriers have been granted dual authority subject to reconsideration if "an improper competitive situation, discrimination or preference" should occur.^{34/} Nevertheless, the caution with which these dual permits have been granted indicates the Commission's concern with equity and fairness.

In air transportation, an equivalent of the operating permit does not exist. (Permits are issued to foreign air carriers for inter-

^{34/} Warrior and Gulf Navigation Co. Extension--Cape Canaveral, 322 ICC 261, (1964); Igert Extension--Arkansas River, 322 ICC 696, 709 (1968).

national air transportation to and from the U.S.) The charter activity of common carriers is unrestricted between points within their operating authority, and has been limited in "off-line" markets less than 2 percent in terms of revenue passenger-miles. The supplemented airlines are expressly forbidden to engage in scheduled air transportation.

Commercial operators of small aircraft are exempt from economic regulation so that air taxi operators do offer both scheduled transportation service and nonscheduled or contract operating services.

Private Operating Rights--Self-Transportation. While no administrative approval is necessary to perform self-transportation, the issue of defining self-transportation has been treated differently across the modes. For railroads, the "Commodities Clause" of the Hepburn Act of 1906 prohibited a railroad from transporting articles in interstate commerce which it had produced or had been produced by its subsidiary companies. This has the effect of prohibiting the railroads from entering into the production of goods commercially. Articles or goods destined for its own consumption can be carried, and lumber was specifically allowed due to the ownership of small railroads by lumbering companies. Similarly, the operation of private railroads by other large industries or holding companies, particularly the steel industry, have been allowed. These "private" railroads are regulated as common carriers.

For trucking, it has been determined that a firm must be its own carrier, and that carriage by an associated subsidiary company does not constitute self-carriage. As well, a "primary business" test has been used to ensure that the self-transportation operations are incidental

to the firm's main business. This attempts to stop the "buy and sell" activities of transportation operators to obtain backhaul transportation. Restrictions have been placed on the minimum duration of contracts to prevent "trip leasing" of vehicles and drivers, and the firm must assume the risks of safe delivery to qualify for self-transportation.

For water transportation, in direct contradiction to its practice for trucking, the ICC has allowed a subsidiary corporation to be established to provide self-transportation for its associated companies. Furthermore, self-carriers have been allowed to engage in for-hire transportation, and Part III of the ICC Act does not specifically require that a certificate or permit be obtained by such carriers. In fact, the grandfather rights of the Water Carrier Act of 1940 provide protection of these for-hire operations for self-carriers engaged in this practice before that time.

In sum, regulation imposes extremely detailed rules concerning operating authority and ownership. Since these rules tend to benefit existing carriers, they have often been attacked as vehicles for the cartelization of the industry. Although they have doubtless had this effect, it is important to realize that they have also tended to ensure that the regulated carriers offered rates and service that are not only fair and equitable, but also that preserve the traditional rate structure. When viewed in this light, these regulations become less pernicious. If regulation is to prevent certain kinds of profit-maximizing behavior and impose certain costs on the regulated carriers, then regulation must also ensure that these carriers earn sufficient return to meet

their opportunity costs. Thus industry stability and constrained cartelization are an essential aspect of the regulatory process.

3. Policy on Competitive Authority

The granting of operating authority is not exclusive; there is no implied immunity from the subsequent granting of competitive authority either from carriers within a mode, or from other modes. In deciding upon granting new authority, the ICC or CAB must balance the benefits accruing to shippers and general public in the market regions with the protection needed by existing carriers to maintain efficient, financially viable operations. The decision is a two-step process in which first there is a finding that public convenience and necessity require new service is made. This may be based on a desire for a new type of service, or on a desire for an alternative source of supply for a given type of service. After finding that new service is needed, the second step is to select a carrier from among the qualified applicants. There is room for much arbitrary judgement in such decisions for particular circumstances, for varying time periods, and between various modes.

The issue of allowing competition between railroads through new rail line construction has been dormant for forty years. At that time, the ICC was reluctant to allow duplicative rail lines to serve identical points, but seemed willing to allow new lines to unserved points even if within the general area of another railroad.

In considering the introduction of competition between common carrier trucking, the ICC has generally placed emphasis on protecting the existing carrier(s), allowing them the opportunity to provide services

to meet any increased demand. However, granting competitive authority is not unknown,^{35/} and a finding that existing service is adequate does not preclude the granting of competitive authority for the benefit of the public. In fact, in the case where the introduction of contract operations is being considered and is competitive with existing common carrier service, the Supreme Court has reversed an ICC decision by stating that common carrier service cannot be considered adequate when shippers state that they desire contract services.

In considering the granting of new trucking authority where none previously existed, but rail service does exist, the ICC has generally found that the superiority of the new and different trucking service was sufficient grounds for finding public convenience and necessity.

In a similar vein, the granting of new water carrier authority in competition with rail alone has generally been based upon the need for a different type of service which possessed "inherent advantages" over rail service. There apparently has been little significant granting of competitive water transportation authorities due to the large volume of exempt water transportation.

For pipelines, the ICC cannot control new construction, and thus has no control over competitive services.

In comparison to the ICC, the CAB has been relatively liberal in granting competitive authorities among air carriers in the major markets. From 1955 to 1970, a policy of ensuring that air passengers had a choice

^{35/} Balch and Martin, Motor Express Common Carrier Application, 47 MCC 75, 78 (1947). Associated Transport, Inc., Extension--Kansas, 54 MCC 528, 529, (1952).

of carriers was followed until less than 25 percent of revenue passenger-miles were produced in monopoly markets. In introducing competition, the CAB has tended to favor strengthening the smaller carriers, and particularly to work toward eliminating the subsidy requirements of the local service airlines by introducing them into longer haul, higher density markets in competition with existing trunk carriers.

Thus in granting new operating authorities, the regulatory authorities appear to balance shipper and carrier interests. In the case of intermodal competition, the Commission has generally felt that the provision of alternative modes was in the public interest and acted accordingly. In the case of intra-modal competition, however, the Commission has generally sided with the carriers and denied the granting of new operating authorities when confronted with carrier opposition, even in the face of shipper complaints about the adequacy of service. At least with respect to trucking operating authorities, the Commission appears to have put industry stability ahead of its other goals. This is in contrast to the behavior of the Board, which has generally attempted to introduce competitive fares into air markets, although in an admittedly cautious fashion.

4. Exit from Operating Authority

There are two issues which pertain to the reduction or cessation of common carrier services authorized in a market: inadequate service/abandonment, i.e., the ability of the carrier to escape the obligations of his certificate; and dormancy/revocation, the ability of the regulator to remove the certificate authority. A common carrier is obligated to accept shipments tendered, and to provide adequate service for

passengers and freight. If traffic is reduced to low levels, it may become uneconomic to continue to supply minimum services, but in the absence of alternative means of transport, the common carrier must continue to supply services.

The issue has been an important one for rail transport for many years because of the reduction in the rail traffic caused by the encroachment of trucking and barge transportation. Rail carriers cannot abandon service along rail lines without ICC approval because of the impacts such abandonment might have upon the property values and industries in the affected communities. Evidence that the line is operated at a loss is not considered sufficient evidence to allow abandonment. The impact on local communities must also be small, alternative service by truck or barge must be available, and the prospects for increased traffic must be poor before the ICC generally will allow abandonment. Because there will usually be at least one large shipper who would be hurt by a cessation of rail service, abandonment is rather difficult to achieve. Thus the ICC is imposing a cross subsidy from the heavily used, high volume lines, to a large number of the railroads' light density lines. In view of the continued erosion of rail traffic by the trucks and the financial weakness of most rail lines, it is problematical, however, whether this cross subsidy can continue to exist. Although the RRRR Act of 1976 recognized this by granting a modest subsidy for the continuation of service in response to shipper protests concerning abandonment, it is questionable whether the legislated subsidies will prove to be adequate.

In contrast to the railroads, the other freight modes may freely abandon service without ICC approval and thus create dormant operating

authorities. Presumably, upon complaint from shippers, the ICC would hold a hearing as to why service obligations were not being met, but it appears that competitive services from the unregulated sectors of these modes are usually sufficient to satisfy shipper needs and no complaint arises. In the absence of traffic, service ceases and the common carrier authority lies dormant. For trucking and water transportation, the ICC may revoke dormant authority after some undefined period of time. It appears that this action occurs only when there are prospects for increased traffic in the market and the ICC is controlling new entry. To ensure its ultimate control over entry, the ICC will not allow the sale of dormant authority.

For air transportation, these issues have a slightly different context since the maintenance of passenger service is involved. The CAB must approve any complete abandonment of service, and it can investigate the adequacy of service offered under any certificate. However, the FAA Act specifically prohibits CAB control over capacity, equipment type, and scheduling. Only the threat of authorizing a new carrier in the market gives the CAB any power in requesting improved service. In markets where multiple carriers are authorized, it is quite common for some of the carriers to exit the market without any reaction from the CAB or affected communities as long as adequate service remains. The method of awarding a route authority means it is possible that some of the markets along the route may be well served at the same time others are not served at all. The certificate authority may be revoked only for noncompliance with a direct order from the CAB.

In sum, then, abandonment only appears to be an issue in the case

of rail service and (occasionally) air service. As long as communities receive adequate rail or air service from other companies, both the Commission and the Board will generally grant abandonment permission to a given firm. However, when the carrier provides the sole service to a community, the regulatory authorities will generally feel that the common carrier obligations necessitate the provision of service. They will then refuse permission to abandon.

D. Implications for Scenario Development

Having reviewed major policy actions with respect to the intercity transportation modes, let us summarize our analysis. In terms of evaluating policy change, the most important conclusion is that since transportation policy attempts to satisfy a multiplicity of goals, any policy evaluation must attempt to assess the impact of change upon this multiplicity of goals. While obvious, this point is extremely important since critiques of existing policies have been notable for their concern with economic efficiency at the expense of other goals.^{36/}

Since critiques of existing policies have generally been made by economists, the concern with economic efficiency is understandable. Indeed, these critiques have performed an extremely important function in demonstrating that in achieving their goals of fairness, income maintenance and industry stability, existing transportation policies have imposed considerable efficiency costs upon society.

Since the policy maker must be concerned with trade-offs at the margin, however, these analyses have not been particularly useful for

^{36/} See, for example, Moore (1972), Keeler (1976), and Douglas and Miller (1975).

policy analysis because they have failed to indicate the nature of the trade-offs between economic efficiency and the other goals. To cite an extreme, for example, if a relaxation of regulation would lead to marked locational price discrimination, a reduction in real income in agricultural and rural areas, and a marked increase in industry instability as measured by bankruptcies and variance in rates, it is likely that the present regulatory policies would be thought to be worth their efficiency costs. If, on the other hand, a relaxation of regulation would have few, if any impacts, upon locational price discrimination, agricultural and rural incomes, and industry stability, then the prospects for deregulation would become considerably brighter. Thus, unless policy makers have some notion of the magnitude of the trade-offs involved, they will generally fail to act to change the status quo.

Consequently, it is the purpose of this research to analyze and quantify the nature of the trade-offs among the various goals of transportation policy. To this end, we are developing a number of linked policy-sensitive models that are described in Volumes III and IV of this report. The next section of this volume will thus briefly describe our modeling approach and indicate how alternative policies could be evaluated by our models.

III. Scenario Development

Having argued that meaningful policy evaluation must include a number of alternative objectives, let us now consider the question of how these various goals can be incorporated into quantitative analysis. To this end, this section discusses the general modeling approach used in this research and indicates how various policies can be evaluated within its context.

The purpose of this research is to develop and implement a number of models that can be used to evaluate transportation policies with respect to the surface freight and air passenger industries. Because of differences in the availability of data, the focus of the freight models and the passenger models is necessarily somewhat different. The freight models are relatively aggregative and consider the impact of policy changes upon the rate structure, profitability, and outputs of the transportation and related industries and upon regional incomes and employment. In contrast, the air models are highly disaggregate and focus upon the behavior of a single firm over a network. Thus the freight analysis is aimed at evaluating industry and regional impacts of alternative transportation policies, while the air analysis is aimed at evaluating specific network effects of a given firm (or a group of firms acting in concert).^{37/}

Nevertheless, the basic structure of the freight and air models is similar in that each assumes profit maximization with known cost and demand functions. Changes in transportation policy are then

^{37/} For a full discussion of these models see Friedlaender et al. (1977) and Simpson et al. (1977).

transmitted through changes in the relevant cost functions, the relevant demand functions, or the competitive behavior of the firms in the industry, which in turn lead to changes in rates, outputs, income, profits and so forth. Thus by linking measures of fairness, income maintenance, industry stability and economic efficiency to changes in transportation policy, it is possible to provide quantitative information about the nature of the trade-offs among these various goals. This section therefore discusses how various general policies can be evaluated in the freight and air models that are being developed as part of this research and considers specific policy scenarios that could be evaluated using these models.

A. Evaluating Freight Transportation Policies

1. The Modeling Structure

The basic premise of the analysis is that relative prices matter. Thus any change in transportation policy should lead to a change in the transportation rate structure, which in turn will affect a wide range of regional and national variables concerning income, output, employment. To measure these inputs, we are developing the following linked models.

- A regional transportation model that determines costs, revenues profits, outputs, shipment characteristics, rates and factor demands by firm, by mode, by broad commodity type and by region.
- A regional income model that determines factor prices, consumer prices, increases, outputs, and employment by broad commodity type.

- A national interindustry model that determines interindustry coefficients, commodity prices, commodity outputs, and factor employment by broad commodity type.
- A small-scale national macroeconometric model that determines factor prices, final demands and consumer prices.

Since these models are quite aggregative, they cannot indicate the impact of policy changes in great detail. Nevertheless, they are of sufficient scope to permit a quantitative evaluation of changes in policy upon the goals of fairness, income maintenance, industry stability and economic efficiency. Thus before turning to specific policies, it is useful to consider how changes in the variables used in this analysis can be interpreted as changes in the relevant goals.

Fairness. Questions of fairness basically relate to discrimination or price-marginal cost ratios. Our analysis will be able to identify relatively broad differences in price-marginal cost ratios for the relevant modes by general commodity type and by region, and by traffic volume. It will thus be able to indicate whether discrimination among commodities, regions and traffic densities will rise or fall as a result of change in regulatory policy; it will not, however, be able to indicate whether specific shippers would face more discriminatory rates.

Income Maintenance. The impact of changes in transportation policy upon agricultural and rural income can be taken into account in a number of ways. First, since the analysis will identify the changes in the price-marginal cost ratios by region, commodity and traffic density,

it will indicate the extent to which the traditional rate structure will be altered by changes in transportation policy. Second, the regional models will directly link change in regional incomes by broad industrial category to change in the rate structure. Third, further linkages between the rate structure and agricultural and regional income will be made via wealth effects, which reflect the capitalized value of changes in the rate structure, and interregional effects, which measure the impact of change in one region's income upon another region. Thus by assessing the impact of transportation policy upon the rate structure and the measures of regional and agricultural incomes, it should be possible to determine the impact of change in transportation policies concerning regulation, abandonment, investment in infra-structure, user charges and so forth upon fairly broad measures of agricultural and rural incomes.

Industry Stability. Changes in profitability, rates, and number of firms are usually thought to be acceptable measures of industry stability. These are captured reasonably well by the freight policy model which should be able to quantify the impact of a change in transportation policy upon the level of profits by mode and firm, the rate structure by mode, and the likely number of firms that would exist under different forms of market structure. In addition, these models should also be able to assess the impact of policy changes upon employment and wage rates by mode.

Efficiency. Economists are generally interested in opportunity costs, or the relationship between actual resource utilization and the least-cost resource utilization. Since our analysis is concerned

with measuring the trade-offs between economic efficiency and other goals, the policy models must necessarily incorporate a broad range of efficiency variables. In particular, these models will enable policy makers to estimate short-run marginal costs and long-run marginal costs by mode and by broad output category and to estimate the price-marginal cost ratios and the resulting dead-weight-loss for different commodities and different modes. Resource savings from adjustments in capacity and traffic allocations can also be measured, as can changes in productivity, industrial concentration and aggregate service measures by mode. Thus in addition to the fairly gross efficiency measures that have usually been presented, this analysis should permit considerably more detail with respect to specific mode and regions.

To summarize then, this analysis should permit policy makers to assess the impact of change in transportation policy upon the following variables that are respectively associated with the goals of fairness, income support, industry stability and economic efficiency.

Fairness

- price-marginal cost ratios by region of origin and destination by mode.
- price/marginal cost ratios by commodity and mode.
- price/marginal cost ratios by traffic density and mode.

Support of Rural and Agricultural Groups

- Rates by commodity and by mode.
- Income by region and broad industrial group (agriculture, mining, manufacture, etc).
- Employment by region and broad industrial group.

Industry Stability

- Profitability by mode and firm.
- Rates by mode and firm.
- Employment by mode and firm.
- Number of firms.

Economic Efficiency

- Long-run and short-run marginal costs of different outputs by different modes.
- Price-marginal cost ratios by different outputs and different modes.
- Resource cost savings from "optimal" adjustments in capacity and labor utilization.
- Resource savings (or costs) associated with traffic allocations resulting from competitive, monopolistic, or oligopolistic market structures as opposed to the present regulatory environment.
- Measures of productivity by transport mode.
- Measures of industrial concentration by transport mode.
- Measures of aggregate level of service by mode.

2. General Policy Analysis

The methodological approach to the evaluation of transportation policies with respect to the surface freight industries is comparative statics. We thus derive an initial equilibrium under a set of initial conditions concerning the cost functions, demand functions, and the competitive behavior of the firms in the transportation industries. We then postulate a change in transportation policy that affects these

initial conditions and determine the new equilibrium resulting from these changes. The differences in the relevant variables between the initial and new equilibrium then measures the impact of a given policy.

Within this framework, it is possible to evaluate a wide range of transportation policies. Figure 1 indicates whether various transportation policies affect the cost or demand functions or the competitive structure of the industry. This indicates that policies generally fall into one of the following categories:

- Those that affect the demand function alone
 - Permissible price discrimination
 - Setting rate levels
- Those that affect both the demand function and the market structure
 - Elimination of rate bureaus
 - Total deregulation of rates
 - Entry controls
- Those that affect the cost function through factor prices
 - Wage settlements
 - Energy policy
 - User charges and subsidies
- Those that affect the cost function through factor utilization
 - Abandonment
 - Union work rules
 - Provision of infrastructure
 - Weight and size limitations
 - Nationalization of the roadbed
- Those that affect cost functions, demand functions, and market structure
 - Mergers and consolidations

Figure 1

	<u>Demand Function</u>	<u>Market Structure</u>	<u>Cost Function</u>
Permissible Price Discrimination	X	-	-
Setting Rate Levels	X	-	-
Total Rate Deregulation	X	X	-
Elimination of Rate Bureaus	X	X	-
Entry Controls	X	X	-
Subsidies	-	-	X
Energy Policy	-	-	X
User Charges	-	-	X
Abandonment	-	-	X
Union Work Rules	-	-	X
Provision of Infrastructure	-	-	X
Weight and Size Limitations	-	-	X
Roadbed Nationalization	-	-	X
Mergers and Consolidation	X	X	X

a. Policies Affecting Demand Function Alone

Policies that affect the freedom of firms to set prices generally affect the demand function alone. Of these, the two most important are policies that deal with the permissible degree of price discrimination and common carrier obligations that require firms to carry all traffic at a rate set by the regulatory authorities.

Price Discrimination. Policies relating to permissible price discrimination affect the specification of the demand function and the nature of the firm's control variables. To consider the most general case, suppose that discrimination by class of user with respect to commodities and regions and by type of service is permitted. In this case, the market demand for mode m in region v would depend upon the prices charged by mode m and its competing modes, the quality levels associated with specific classes of service on the own and competing modes, the quality levels that are common to all classes of service, and other variables such as regional income and so forth that are not controlled by the firm.^{38/} Symbolically this can be written as

$$T_{ijm}^{rd} = T_{ijm}^{rd} (P_{ijm}^{rd}, P_{ijc}^{rd}, Q_{jm}^d, Q_{jc}^d, S_m^d, S_c^d, A) \quad (1)$$

where T_{ijm}^{rd} represents total shipments between regions O and R by commodity i at service class j ; P_{ijm}^{rd} and P_{ijc}^{rd} represent the price charged by mode m and its competing mode(s) c in region R from shipments of commodity i at service class; from region r ; Q_{jm}^d and Q_{jc}^d represent the vector of service classes j in region d by mode m and its competing mode(s) c ; S_m^d and S_c^d represent the vector of quality variables that are common to all classes of service that are offered in region d by mode m and its competing mode(s)

^{38/} We consider the market demand function for notational simplicity.

C_i ; and A represents a vector of variables that are not controlled by the firm.

Present regulatory policy for the rail and trucking industry permits firms to discriminate by region, by commodity, and by class of service to a certain extent. Thus rail firms charge different rates for different commodities from different regions depending upon whether they are shipped by ordinary boxcar operations, piggyback, or unit trains. Similarly, trucking firms charge different rates for different commodities in different regions depending upon whether they utilize truckload or less-than-truckload service. Thus the control variables available to the rail and trucking firms are P_{ijm}^{rd} , Q_{jm}^d , S_m^d , where r ranges over all regions, i ranges over all commodities, and j ranges over all classes of service.

A rate structure based on strict value of service pricing would permit firms to discriminate on the basis of commodity, but not on the basis of region of shipment or class of service. In this case, the demand function would take the following form

$$T_{im}^d = T_{im}^d (P_{im}^d, P_{ic}^d, S_m^d, S_c^d, A) \quad (2)$$

Thus $P_{ijm}^{rd} = P_{ism}^{hd}$, for all regions r and h and all classes of service j and s . Since price discrimination with respect to class of service is not permitted, there is no advantage to offering alternative classes of service, and they are consequently not included in the demand function. Since, however, the common quality variables can affect demand, they remain in the demand function.

In contrast, a rate structure based on cost differentials alone (a so-called cost-based rate structure) would permit no price discrimination with respect to class of user, but would permit price discrimina-

tion with respect to class of service. This rate structure is generally followed in the air industry, and there is periodic talk of adopting it in the surface freight industries. In this case, the demand function would take the following form:

$$T_{jm}^d = T_{jm}^d (P_{jm}^d, P_{jc}^d, Q_{jm}^d, Q_{jc}^d, S_m^d, S_c^d, A) \quad (3)$$

and the firm's control variables would be prices for each class of service, P_{jm}^d ; the level of service for each class of service, Q_{jm}^d ; and the general level of service that is common to all service classes, S_m^d .

Rate Setting. The situation in which the regulatory authorities set a given rate for common carrier service can be analyzed in a straightforward manner. In this case, the transportation firms must carry all traffic of a given class at a specified rate. Hence, unlike the perfectly competitive firm, which adjusts output to ensure that price equals marginal cost, the regulated firm's output is simply determined by the demand relationship that

$$T_{ijm}^{rd} = T_{ijm}^{rd} (\bar{P}_{ijm}^{rd}, \bar{P}_{ijc}^{rd}, Q_{jm}^{rd}, Q_{jc}^{rd}, S_m^d, S_c^d, A) \quad (4)$$

where the bar over the variable denotes that it is set by regulatory authority. Nevertheless, in so far as the firm can control service variables, it has some control over the amount of traffic that it carries.

b. Policies affecting Demand Functions and Market Structure

The analysis of different forms of price discrimination or of specific rate regulation is not particularly sensitive to questions of market structure. In the case of price discrimination, a monopolistic rate structure is usually assumed; otherwise, discrimination would not be possible. Note, however, that a monopolistic market structure does not

imply that a firm acts as a monopolist, but rather it implies that the firms in the industry either implicitly or explicitly collude to achieve the joint profit-maximizing solution. Similarly, in the case of specific rate setting, the market structure is largely irrelevant, since the market demand with respect to the regulated price determines the output. Nevertheless, in so far as different market structures affect the firm's ability to exercise control with respect to the service variables, it may be useful to take the competitive behavior of the industry into account.

In contrast, policies concerning total rate deregulation, rate bureaus, and entry must be analyzed within the context of alternative market structures and the nature of the demand function.

Total Rate Deregulation. The impact of the total deregulation of rates not only depends upon the degree of price discrimination followed by firms with respect to class of user and level of service, but also depends upon the market structure of the industry. In a totally deregulated environment, firms would presumably attempt to discriminate by region, by commodity, and by class of service; and hence they would face the most general demand function, given above in eq. (1). Since, however, they may be subject to institutional constraints, it is entirely possible that they can only discriminate with respect to some of the variables.

Of course, the ability to discriminate implies some market power, which the firm may not have. Thus there may be sufficient market constraints to prevent the firms in the industry from exercising any discrimination at all. Therefore it is desirable to consider the nature of the equilibrium under different market structures: joint profit maximization,

perfect competition, monopolistic competition, and oligopoly.^{39/} Note that the market structure is not generally endogenously determined, but rather must be specified and the implications of alternative market structures then analyzed.

Entry and Rate Bureaus. The existing structure of rate bureaus essentially permits firms in the trucking and rail industries to pursue policies of joint profit-maximization. Policies affecting entry can easily be handled within this context by postulating that firms with given cost structures enter the industry and then by analyzing the nature of the new equilibrium that exists with more firms in the industry. Since, however, the number of firms may affect the industry's ability to practice price discrimination or to pursue joint profit maximization, it is probably desirable to postulate different demand functions and different patterns of competitive behavior and determine the resulting equilibrium in each of these cases.

Policies affecting rate bureaus can be handled in a similar manner. In this case, however, it is quite likely that joint profit-maximization will not continue to exist. To analyze the impact of the abandonment of rate bureaus we therefore postulate different forms of market structure (perfect competition, monopolistic competition, monopoly, and oligopoly) and determine the equilibrium that would obtain in each of these cases. In this way we should be able to obtain a qualitative notion of the impact of policies aimed at increasing the competitive behavior of the transportation industries.

^{39/}There is some evidence that oligopolists pursue objective functions that differ from profit maximization. In this case, the analysis would have to be adjusted accordingly.

c. Policies Affecting Cost Function Alone

The theory of cost and production indicates that in long-run equilibrium the costs of a firm depend upon the firm's outputs and the factor prices the firm must pay. Hence we typically write the firm's long-run cost function as

$$C = C(y, w) \quad (.5)$$

where C represents the firm's long-run total costs, y represents a vector of the firm's output and w represents the vector of factor prices facing the firm.^{40/}

Since, however, the firm may not be in long-run equilibrium, it is also useful to consider the firm's short-run variable cost function, which depends upon the quantities of the fixed factors owned by the firm, the outputs produced by the firm and the factor prices facing the firm. Thus we typically write the short-run variable cost function as:

$$\tilde{C} = \tilde{C}(y, \tilde{w}, x) \quad (6)$$

where \tilde{C} represents the short-run variable costs of the firm; y represents a vector of the firm's output; \tilde{w} represents the vector of the prices of the variable factors; and x represents a vector of the firm's fixed factors.

Since costs depend upon the output mix, factor prices and the quantity of fixed factors, anything that causes any of these variables to change will cause the cost function to shift.

Changes in Factor Prices. Policies that affect factor prices will have a direct impact upon the cost functions of the firms in the transportation industries. While it is possible to consider a high de-

^{40/} It is typically assumed that the firm is a price taker in the factor market so that the average factor cost equals its marginal cost. If this assumption is not valid, the analysis must be modified accordingly. Nevertheless, there is little evidence to indicate that firms in the transportation industries exercise monopsony power.

gree of disaggregation with respect to factors, it is useful to characterize factors as labor, capital, fuel, and materials. In terms of federal transportation policy there is probably relatively little that affects the price of materials; these are largely determined by market forces and macroeconomic policies that have little to do with transportation per se. However, the costs of labor, capital, and fuel are directly affected by federal policies. The federal government plays an active role in railroad labor negotiations and take an active interest in trucking labor negotiations. Thus the degree of governmental intervention with respect to wage settlements in the transportation industries can have an important impact upon transportation cost functions and hence upon the nature of the equilibrium in the transportation and related industries.

The proper charge to impose on heavy trucks and barges for the costs of the federally provided infrastructure and right-of-way has long been a controversial issue. While economists have generally agreed that barges should pay some user charge for waterways, there is considerably less consensus about the proper magnitude of these charges. Similarly, whether heavy diesel trucks pay their full share of the costs of constructing and maintaining the highways is largely an unresolved issue. Moreover, there is virtually no information concerning the impact of adopting policies that would substantially alter the structure of user charges or subsidies in the transportation industries.

While this research is not aimed at addressing the question of the "proper" user charge to apply by mode, it is particularly well suited to analyzing the impacts of changing the structure of user charges and subsidies. Insofar as user charges are reflected in factor costs or output taxes, it is possible to adjust the cost functions to reflect changes

in user charges or subsidies. Given these changes in the relevant cost functions, it is then possible to determine the new equilibrium configuration of the transportation and related industries and thus assess their impact.

Energy policies affect fuel costs directly and changes in fuel costs in turn cause changes in the transportation cost functions. Hence by determining how alternative energy policies would affect fuel costs, we can then consider how they would affect the transportation and related industries.

Changes in Fixed Factors. In the short-run, costs are influenced by the quantity of the fixed factors controlled by the firm or, stated alternatively, the scale of the firm. Thus policies that permit transportation firms to adjust the quantity of their fixed factors can have an important impact on the costs of a given mode.

This issue is particularly important with respect to the railroads, where it is generally agreed that the railroads have more track than they would like to maintain if they were free of some of their common carrier obligations. Similarly it is generally agreed that union work rules require the railroads to maintain larger train crews than they would in the absence of these rules.

Both of these questions can be answered in the context of the present research. By estimating short-run cost functions in which the amount of truck and train labor is treated as fixed, we can then obtain the long-run cost function that would exist if optimal adjustments in capacity and train crews were permitted or the short-run cost functions that would obtain if some adjustments in capacity or train crews were permitted.^{41/} By

^{41/} For a full discussion of the methodology involved, see Friedlaender, et. al., (1977).

determining the new equilibrium that would exist if these new cost functions were substituted for the existing ones, we can then assess the impacts of policies aimed at relaxing restriction on factor adjustments.

Questions of the provision of infrastructure and weight and size limitations can similarly be handled in this context. New infrastructure is akin to a change in the quantity and quality of the capital stock and can be handled accordingly. Similarly, changes in the weight and size limitations of trucks can also be translated into changes in the nature of the available capital stock. In both cases, changes in the cost functions resulting from changes in infrastructure or the weight and size of trucks can readily be determined and the resulting equilibrium can then be analyzed.

While an extremely complex issue, it should also be possible to analyze the broad implications of nationalizing the railroad roadbed within the framework of the present analysis. Nationalization of the roadbed is akin to the transformation of a fixed factor into a variable factor at a federally determined price. Thus we could adjust the cost functions to reflect that the cost of the roadbed was no longer a fixed charge, and assign a charge for its use that reflects a reasonable fee structure. Given the new cost functions, it is then straightforward to analyze the nature of the resulting equilibria with respect to outputs, rates, profitability, etc.

Of course, the specific impact of any program aimed at nationalizing the roadbed must be very dependent upon the way in which the projected take-over would be financed. Systems of financing that relied on general revenues, a general transportation trust fund, or a railroad trust fund would each have very different implications. Thus any analysis of the nationalization of the railroad roadbed must consist of a careful analysis

of the possible structure of financing. Nevertheless, such an analysis seems feasible within the framework of the present analysis.

d. Policies Affecting Cost Functions, Demand Functions, and Market Structure

While most transportation policies tend to affect either the cost functions or the demand functions and the associated competitive behavior of the firms in the industry, it is likely that mergers and consolidations simultaneously affect cost functions and demand functions of the affected firms and may influence the competitive behavior of the industry.

Mergers and consolidations affect cost functions since firms typically consolidate capital and labor after a merger. Thus instead of dealing with two or more distinct cost functions, after a merger we deal with a single cost function that presumably utilizes less than the sum of the fixed factors of the merged firms. Thus the impact on mergers upon factor utilization can be analyzed by combining the cost functions of the component firms and adjusting the quantity and quality of the fixed factors accordingly.

Mergers and consolidations affect market structure by influencing the number of firms in any given market. Thus mergers can be analyzed in a fashion that is analogous to the analysis of entry controls, although in the case of mergers we typically consider the elimination of firms, while in the case of entry controls we typically consider the addition of firms. Nevertheless, the two are analytically equivalent.

Mergers and consolidations also affect the demand functions of the affected firms. In this case, however, the issue is not so much the question of permissible price discrimination, but the consolidation of demand functions. Insofar as advertising or market power may make

the merged demand function different from the sum of the demand functions of its component firms, an analysis of mergers requires a careful analysis of the way in which the demand function of the merged firm should relate to the demand functions of its component firms.

To analyze the impact of mergers, we therefore analyze the nature of the pre-merger equilibrium and then adjust the cost functions, the demand functions, and the competitive behavior of the industry to reflect the likely outcome of the merger. Given these, we can then analyze the equilibrium resulting from these new cost and demand functions and market structure and accordingly assess the impact of the proposed merger upon the affected transportation and related industries. The analysis of consolidations would proceed in a similar fashion.

To summarize briefly, this analysis can in principle analyze transportation policies that affect the demand functions, cost functions, or market structures of the transportation industries. In practice, however, this analysis requires a careful translation of the specific policy into a specific change in the appropriate function. While some policies, such as changes in the level of user fuel taxes, can be analyzed fairly simply, other policies, such as the nationalization of the railroad roadbed, require a major research effort to translate them into appropriate changes in the relevant functions. Thus any specific policy will generally require considerable effort to ensure that the specified change in the cost or demand functions or market structure accurately reflects the direct impact of the proposed policy. Nevertheless, such an analysis should be feasible and provide a valuable aid in the decision making process of policy makers.

To understand the complexities involved, an analogy with macro-

economic policy evaluation may be useful. Suppose we want to analyze the impact of imposing a personal income tax surcharge of 10 per cent. Since virtually no macroeconometric models incorporate the federal rate structure, considerable effort must be made to translate the change of rates into an equivalent change in the relevant personal tax function. Once this has been specified, however, it is quite straightforward to analyze the change in the tax function within the context of existing macroeconometric models of the national economy.

Similar considerations apply to the present analysis. This research is aimed at constructing a number of linked models of the transportation industries that can be used for policy analysis in a fashion analogous to the way in which macroeconometric models are used to analyze various fiscal and monetary policies. In both cases, however, the policies do not generally enter the models directly, but must be translated into shifts in the functions that comprise the model. In the case of fiscal policy, this generally means shifting tax or expenditure functions, while in the case of transportation policy, this generally means shifting the relevant cost or demand functions or the nature of the market structure of the affected industry. Once the relevant functions have been altered, it is relatively straightforward to analyze the impact of change in policy. It should be stressed, however, that the translation of policy changes into appropriate changes in the relevant functions is not an easy job and will generally require a large research effort, although probably not as great a one as the development of the analytical models themselves.

B. Specific Policy Analysis

Although it is premature to attempt to analyze a specific trans-

portation policy in much detail, it should be useful to consider how the major provisions of the Railroad Act of 1976 could be handled in the context of the present research.

The basic provisions of the Railroad Revitalization and Regulatory Reform Act of 1976 include the following:

- Financial restructuring of the Northeast and Midwest railroads
- Reform of rate regulation
- New subsidies and abandonment procedures for branch lines
- New procedures for mergers and consolidations
- Organizational changes in the ICC
- Subsidies and loan guarantees for improved passenger service

Of these provisions, those having to do with rate regulation, subsidies, and abandonment should be able to be evaluated within the context of the present analysis, while those having to do with the financial structure of the rail industry and procedures for evaluating mergers and rates probably fall outside the scope of the present analysis.

a. Rate Regulation

The Railroad Act of 1976 contains the following important provisions with respect to rate setting:

- Rates that are greater than or equal to variable (marginal cost) will not be judged too low.
- Rates will not be found too high unless the firm exhibits excessive "market dominance."
- Rates for a given carrier will not be held to a particular level to protect a competing carrier unless the ICC finds that such rates reduce the "going concern value" of the competing carrier.

- For the next two years, railroads may raise or lower specific rates by as much as 7 per cent from the level in effect at the beginning of each year without fear of suspension.

Each of these provisions can be analyzed within the framework that is being developed in this research. The question of whether rates are greater than or equal to marginal costs can be answered quite easily. In the railroad industry we plan to estimate short run and long run cost functions for the industry and for the firms in the industry. By differentiating these with respect to the relevant output variables we can then determine the marginal cost of each output. By comparing this with the rate at which the good is carried, we can then determine whether price is greater than, less than, or equal to marginal cost. Of course, the marginal cost figures derived from this analysis will be quite aggregate and may not reflect deviations due to specific circumstances regarding a specific haul. Nevertheless, they should be indicative of the general relationship between rates and marginal costs for a wide range of commodities.

Questions of market dominance are somewhat more complicated to handle. By postulating market structures characterized by perfect competition, monopolistic competition, oligopoly, and joint profit maximization, it should be possible to determine the rate charged for each commodity and the output of each firm under alternative market structures. By comparing this to the actual rate levels and outputs, it should be possible to obtain an idea of the actual market structure that the industry follows. For example, if we found that the price/marginal cost ratio for a given firm was high, but that the industry behavior under perfect competition corresponded closely to the actual industry behavior, we could assume

that there was little if any market dominance by that firm. Alternatively, if we found that a monopolistic market structure gave a good characterization of actual industry behavior, we could infer that some elements of market dominance existed.

The question of umbrella rate-making can be analyzed within the context of a multi-mode equilibrium. Suppose that we jointly analyze the equilibrium that would exist between two modes (say rail and truck),^{42/} based on existing cost functions, demand functions, and a specified rate structure. We can then compare the profitability of the firms in each mode under the free rate structure with that of the "umbrella" rate structure. If the profitability of the firms in the "protected" mode were substantially less under free rate competition than under the "umbrella" rate structure, we could infer that rates were actually set to protect the competing mode. If, on the other hand, no significant difference in rates or profitability occurred, we could probably infer that umbrella rate making was not an issue.

Whether the 7 per cent annual rate change will act as a constraint can similarly be analyzed by postulating free rate determination under a reasonable market structure. If the difference between the initial rate structure and the projected rate structure is more than that permitted by the legislation, we can infer that firms will probably take advantage of these provisions. Alternatively, if the difference between the initial and the projected rate structure is less than 7 per cent, we can infer that this provision is not of substantive importance.

b. Subsidies and Abandonment

The Railroad Act of 1976 contains provisions for subsidy and abandon-

^{42/} For a full discussion of this, see Friedlaender, et. al. (1977)

ment of light density lines, and provision for subsidies for passenger service.

Light Density Lines. Under the new legislation, abandonment of light density lines is made more difficult, while the federal government provides \$360 million for assistance to local rail services. Whether this sum is adequate to meet the need can be analyzed within the context of the railroad cost functions. Suppose we define secondary track and main-line track as two distinct fixed factors and estimate a short-run cost function accordingly. By assuming that the railroads can adjust their secondary track in an optimal fashion, we can then derive the long-run cost function that would exist if the railroads were able to adjust their secondary track to minimize their costs. By then comparing the short-run total costs at the actual level of output with those that would obtain if the railroads adjusted secondary track in an optimal fashion, we can then determine the magnitude of the potential cost savings that could be obtained from abandonment of light density lines. If these savings were less than \$360 million, we could infer that the present subsidy would be adequate to encourage the railroads to maintain existing service. If these savings were greater than \$360 million, we would have to infer that these subsidies were inadequate to encourage the railroads to maintain service on their secondary lines.

Passenger Service. The Railroad Act of 1976 also contains a number of provisions aimed at improving service on the Northeast corridor. Specifically, the roadbed of the Washington-Boston corridor is to be upgraded so that the trip time between Washington and New York would be 2 hours, 40 minutes and the trip between New York and Boston would be

3 hours, 40 minutes. To implement this USRA is authorized to make up to \$1.75 billion available to Amtrack in interest-free loans. In addition, \$600 million in loans for working capital will be made available as well as a loan guarantee of up to \$1 billion.

It is difficult to see how these provisions can be handled within the context of the present analysis. Basically, the issue is an engineering one rather than an economic one. Specifically, to determine the adequacy of these provisions, it is necessary to determine the cost of upgrading the roadbed to permit the prescribed travel times. By comparing this figure with the loan guarantees and other sources of railroad capital it should be possible to determine the adequacy of the loan guarantees. However, this is not a problem that the models that are being developed in this research can shed much light on.

Similarly, the existing research is not well adapted to analyze questions having to do with the financial structure of the firms. Many of the provisions of the Railroad Act of 1976 deal with the financial structure of the bankrupt railroads in the Northeast and Midwest. Since the financial structure of the railroads does not enter into the cost or demand functions, there is no mechanism to translate changes in financial structure into changes in the cost and demand functions. Thus questions of the impact of financial reorganization are beyond the scope of this analysis. Nevertheless, questions of physical reorganization are entirely within the scope of the analysis framework followed here, and it would be quite possible to evaluate the impact of system consolidation. This analysis would closely follow that of mergers, outlined above.

c. Organizational and Procedural Changes

This research is not particularly well suited to evaluating organiza-

tional and procedural changes with regard to review of rates, mergers or similar matters. As explained above, this research is based on comparative statics, which compares alternative equilibria under different sets of initial conditions. As such, however, it does not consider the time path of the equilibrium. Since the analysis is essentially static, it cannot incorporate dynamic questions of the timing of review. While it would obviously be desirable to extend the research to encompass these dynamic elements, such an extension is presently beyond the scope of analysis.

4. Summary and Conclusions

While hardly exhaustive, it is hoped that this discussion should indicate the kinds of transportation policies that can be evaluated within the framework of this research, and the methodological approach used in performing this evaluation. The basic methodology is firmly grounded in conventional economics and consists of comparative statics. We thus determine an initial equilibrium with respect to the relevant transportation and related industries. By translating changes in transportation policies into changes in the cost functions, demand functions, or market structures of the relevant transportation industries and determining the resulting equilibrium, we can then assess the impact of the policy not only upon the firms in the transportation industries themselves, but in other industries, upon regional incomes and so forth. Thus while the outlined methodology is admittedly limited in terms of its static nature, it should yield valuable insights into the impact of alternative transportation policies.

B. Evaluating Air Transportation Policies

The methodological approach to the evaluation of economic regulation of the airline industry is through profit optimizing airline network equilibrium models for a given cost function which describes the operation of a typical set of current aircraft, and a set of demand functions for each city pair market sensitive to price, travel time (frequency), and competitive supply. These models find an optimal pattern of routing aircraft of varying sizes through the network such that there is an equilibrium between supply and demand in every market. We are then in a position to change cost functions, demand functions, prices, competitive structures in a market, network structure, etc. and to see the airline system response. This can be exercised for the airline industry or for a particular firm within the industry.

1. Industry Scenarios

We are pursuing a number of policies in the pricing area. Since we are placing a complete schedule of demand versus price in each market, we can free the model to choose optimal prices. With certain assumptions about competitive structure and behavior in each market, it is possible to determine the pattern of prices in different markets for a network consisting of the top 91 markets among the top 13 cities in the US airline system. This provides us with an initial indication that the variations in prices in these markets is not unusual, and does not deviate far from present price levels.

We have also postulated a differentiated demand for travel in each

market, i.e. a split into business and pleasure demand; business prices are fixed with business demand responsive to frequency; pleasure demand responds to prices but not frequency. Further work is now underway to calibrate demand models which have this business/pleasure split using data obtained from inflight quarterly surveys conducted in the past several years. In this scenario, we have the dual market variables for frequency and pleasure price to be found at network equilibrium. As an alternative scenario, we postulate a business airline system separate from a pleasure charter airline system, and solve for network equilibriums separately. Early indications show quite clearly that the dual system is much more desirable in supplying good services at lowest cost.

Another variation which we will explore involves increasing the overall level of demand among these markets to see if the industry produces services at lower average costs as output expands; i.e. we are looking for economies of scale by varying the scale of demands in the markets of the network. Again, early results show small economies of scale with marginal costs being 6 percent below average costs.

The effects of changing network structures will also be attempted. We are interested in the relative efficiencies of "hub and spoke" networks relative to "nonstop" networks when aircraft of different sizes are available. A network system is being built for the Detroit - St. Louis - Chicago area of the country. We will change the possible routes which can be flown by airlines in this triangle to see if any conclusions can be reached on the impact of network structures.

Most of our scenario work in the area of entry will be performed using a complete model of Continental Airlines. This model is now operational and

has replicated Continental's pattern of service in 1973. We intend to explore the following possible changes in Continental's route authority: addition of certain cities (and appropriate routes) such as New York and Atlanta; addition of certain routes connecting cities already in Continental's system such as Chicago-Miami, Los Angeles-Miami, Chicago-San Francisco, etc. We are assuming that an equal market share competitive equilibrium will be reached with the existing carriers in those markets at fixed and varying prices. We want to see if these markets are attractive to the Continental system, and which lesser markets and routes are dropped, or have reduced service. We assume a fixed fleet of aircraft.

There will be other scenarios investigated as we begin to see the importance of various factors. As can be seen from the discussion above, we are just now beginning to obtain results. We hope that further work will generate suggestions for changes in the economic regulation of US domestic airlines in the areas of pricing and entry which introduce more degrees of freedom in competition and which lead to higher levels of economic efficiency.

2. The Modeling Structure

The models being used to evaluate new policies for regulating air transportation are versions of the Fleet Assignment network models developed by the Flight Transportation Laboratory over the past several years. Their basic premise is that the basic economic relationships between demand and supply in air transportation can only be properly analyzed when market demands for each city pair on a network are grouped together by the supply variables which route flights through the network while simultaneously determining frequency of service, and aircraft size. The models produce an equilibrium between supply and demand on a network for a given airline (or transportation firm). With some assumptions about airline competitive behavior in markets, they can be made to represent industry behavior on a network system.

The models require a detailed set of input data. For each city pair market, a demand function responsive to price and frequency of service is specified. If necessary, the passenger demand is split into business and pleasure segments. The variable costs over a period of a year are used to describe the costs of flight operations of different types of aircraft, and the costs of station operations in the form of aircraft departures and passenger boardings. Generally, the number of available aircraft of each type is restricted, and an average daily utilization of the fleet specified. A large number of possible routings for aircraft are identified, along with a listing of paths for connecting passengers who use portions of more than one aircraft routing to go from their origin to destination.

The model generally optimizes the selection of aircraft routing,

frequency, and size to maximize the system contribution to overhead. (We have found this objective function best reproduces actual airline scheduled operations for several domestic airlines - other system objectives can be used.)

There can be a variety of constraints applied to this optimization model. We can specify maximum or minimum load factors for a segment (or system); we can specify maximum or minimum levels of service for a city pair market or individual city; we can limit the available fuel; we can specify maximum or minimum usage of aircraft types; or we can specify maximum or minimum system activity in the form of passengers carried, revenue passenger miles, or available seat miles. (Note we can also specify a maximum of available seat miles in a portion of the system such as possible new markets during a transition to free entry.)

Thus, we have a large number of control variables available to study the system impacts of various new policies for regulating air transportation. It is useful to consider how these might be used to study impacts upon the relevant goals of fairness, rural income maintenance, and industry stability.

Fairness. Since we can input the complete schedule of demand versus price, these models will return an optimal set of prices for services in every market under the specified economic conditions. Thus, we can see if freeing prices leads to a wide divergence in rates for similar service in low and high density markets. By splitting the demand into business and pleasure segments, it is possible to see the divergence in rates for these classes of service in the same market.

Rural Income Maintenance. Because of the lack of regional economic

models, none of the regional income transfer issues can be studied. However, if exit is freed the models will be able to show the increase in prices, the reduction in service frequency, and service abandonment in low density, rural markets as carriers move their existing fleets of aircraft to more lucrative and competitive markets.

Industry Stability. For a given set of economic conditions on an airline network, these models show the airline system response, the changes in profitability, rates, and activity and service levels. They are static models, however, and cannot demonstrate the dynamics of interactive market competition between airlines with different networks. It is possible to consider solving the model sequentially airline by airline to see the responses to each other's moves in terms of pricing, entry and exit. There probably is no equilibrium to such competitive conditions, and the dynamics require a valid description of the game strategies for each airline management. It would be difficult to guess the corporate strategies which might be followed.

Economic Efficiency. One of the inputs to the industry models is a description of competitive airline behavior and market showing drawn from current experience. We can postulate the number of carriers in a market, and see the impact on efficient use of resources. It is also possible to produce an industry network solution which postulates monopolistic markets (more than one firm may exist, but there is only a single carrier in each market). Another interesting possibility is to increase the scale of travel demand and study the economies of scale which should appear as larger aircraft are routed over the network structure.

To summarize, these airline network models should permit policy makers

to assess the impact of various changes in domestic air transportation policy in the areas of fairness, rural interest, industry stability as well as economic efficiency. The relative sizes of these impacts are needed in performing the tradeoffs necessary for effective political consensus on proposed policy changes relative to air transport.

3. General Airline Policy Analysis

Here we demonstrate the capabilities of our airline models to study various abstract changes in policy which might be considered. The next section considers the possibility of analyzing some of the policy changes enunciated by the proposed Aviation Act of 1975.

a. Trunk Industry Scenarios

A model has been established which covers the 91 domestic airline markets between the top 14 U.S. cities. Using this model, it is possible to perform case studies on the effects of various policy proposals concerning pricing, entry/exit, and merger on the trunk airline industry. Larger models can be built as we determine the interesting cases and perceive the need for our accurate evaluation of policy impacts. At present, we are in an exploratory mode to test the models, and see preliminary case study results.

We can classify our analysis cases as follows.

Pricing. The models can accept a fixed price which then can be varied to see its impact on passenger demand and airline profitability and activity. The market demands may be responsive to frequency of service in this case, and we describe this case as "business" demand. Alternatively, we may make demand responsive to price, and not responsive to frequency. We describe this as "pleasure" demand. Finally, we can have both components

of demand present in the markets. Thus, we have as input controls the level of fixed prices, and the elasticities of market demands for price and service frequency. We postulate the competitive behavior of the existing airlines in each market and allow no entry or exit. Under these conditions, we can study the impacts of varying the level of prices, the elasticities of demand, and the freeing of pleasure prices. The latter case gives some indication of price discrimination by class of service and market location.

Entry/Exit. If we vary the number of competitors in each market, we can study the impacts of increasing or decreasing levels of competition throughout the airline network. The impact of having monopolistic markets can thus be studied showing its impact on economic efficiency, and any economies of scale in network operations. Another possible policy change relates to specifying airline operating authority by cities rather than routes, so that non-stop authority exists in every city pair. This would increase the potential number of competitors in these markets. With the two segments of business and pleasure demand defined, the issue of whether they should be served by the same aircraft arises, or in other words, whether the industry would assign a number of its aircraft to low cost charter service in pleasure markets. By controlling load factors and segregating business and pleasure services this issue can be studied.

Cost. As with the surface freight model, there are policies with respect to labor, airport landing fees, fuel prices, ATC user charges, noise taxes, etc. which primarily affect the costs of providing airline service. These are easily incorporated into the existing airline models.

Mergers. If two particular airlines were to merge their route authorities and fleets, the current models could establish the impacts on

economic efficiency, profitability, and service levels before and after the merger.

b. Regional Airline Scenarios

Here a model is being established to study the impacts of freeing a local airline carrier from its traditional role as a feeder airline with subsidized service.

Entry/Exit. The prime case study here is to study the efficiencies of the traditional hub and spoke route structure. By introducing new bypass routes, the model has the choice of shifting to through and non-stop services rather than connecting service through a hub. The issue is what will an individual airline do with new entry freedoms, and does it lead to a more efficient overall airline industry.

Pricing. It is possible to postulate demand-price schedules for these regional markets and see the impact upon prices, service offerings, and airline profitability.

c. Airline Firm Scenarios

In these cases, we have constructed a model for Continental Airlines using 1974 data on costs, traffic, fleet, etc. available from the C.A.B. Since the network models are sensitive to the actual network operating authority of an airline firm, we can study the impacts of proposed changes in aviation policy on a particular airline. If necessary, other actual airline network models can be established to evaluate particular policies, or the sensitivity to different network structures.

Entry/Exit. The prime goal in the Continental Airline case study is to see which new markets would be entered, and which existing markets would be abandoned under various assumed conditions. New markets have

been grouped around cities; New York which is a new station for Continental; Chicago; Dallas/Fort Worth; Miami; and Los Angeles and San Francisco. As well as allowing Continental to consider these new markets, the present restrictions to its operating authority can be removed. We are also allowing Continental to purchase new aircraft for its fleet, and increase the operating cost of these new additional aircraft to include ownership or rental costs. As Continental moves into new competitive markets, we are allowing the prices to drop by 10% and 20%.

Thus, for a particular airline as it operated in 1974, the case study provides information on the restructuring of service offerings to achieve maximum profit under conditions of free exit and entry. We assume the other airlines remain fixed in their present service patterns, and only respond with price changes. This case can be extended to other assumed competitive responses.

4. Specific Policy Analysis

While the previous section described possible changes in aviation policy changes in an abstract manner, it is obvious that some of these changes have been proposed in the several bills before Congress. The models can be used to evaluate the impacts of specific provisions of some of these bills.

For example, the DOT bill, (Aviation Act of 1975) proposed a discretionary expansion of an airline's operations into new markets with constraints applied to the annual expansion to ease transitional problems. This can easily be applied in the air network models. Whereas, the case study of Continental Airlines presumes that corporate strategy would concentrate expansion on service from certain cities where new expanded station operations would be necessary, all new markets could be considered simultaneously

with a restriction on the total system increase in available seat miles in new markets.

Another provision of the DOT bill describes the exemption of any airline using aircraft with less than 56 seats. There are a number of turboprop and jet transport aircraft available to a potential new airline with ranges up to 3000 miles. Is it possible to foresee the creation of longer haul, low to medium density "commuter" airlines operating non-stop services under this exemption? By creating a new airline which has unlimited numbers of these aircraft with various estimates of operating cost, it is possible to see which markets would be entered with these aircraft, and the diversion of traffic to these new exempt carriers.

References

Volume II

- Bailey, E.E., Economic Theory of Regulatory Constraint, (Lexington Books, Lexington, MA), 1973.
- Benson, Lee, Merchants, Farms, and Railroads: Railroad Regulation and New York Politics, 1850-1887, (Harvard Univ. Press, Cambridge, MA), 1955.
- Buck, Solon Justus, The Granger Movement, 1870-1880, (Harvard Univ. Press, Cambridge, MA), 1965.
- Caves, Douglas W. and Laurits R. Christensen, "Modeling the Structure of Production in the U.S. Railroad Industry," Mimeo, Sept. 1976.
- Cherry, Russel C., "On the Economic Efficiency of Inefficient Regulation," New England J. of Business and Economics, Vol. 1, No. 2, Spring 1975.
- Douglas, George W. and James C. Miller, Economic Regulation of Domestic Air Transport, (The Brookings Institution, Washington, D.C.), 1974.
- Eads, George, The Local Service Airline Experiment (The Brookings Institution, Washington, D.C.), 1972.
- Fellmeth, R.C., The Interstate Commerce Commission: Public Interest and the Interstate Commerce Commission, (Grossman Publishers, New York), 1970.
- Friedlaender, Ann F., The Interstate Highway System, (North-Holland Publishing Co., Amsterdam), 1965.
- Friedlaender, A.F., The Dilemma of Freight Transport Regulation, (The Brookings Institution, Washington, D.C.), 1969.
- Friedlaender, A.F., "The Social Costs of Regulating the Railroads," Amer. Econ. Rev., May 1971.
- Friedlaender, A.F. et al., "A Policy Model for the Surface Freight Transportation Industries," Alternative Scenarios for Federal Transportation Policy, Vol. III, M.I.T., Center for Transportation Studies, January 1977.
- Friendly, Henry J., The Federal Administrative Agencies, (Harvard Univ. Press, Cambridge, MA), 1962.
- Fulda, Carl, Competition in the Regulated Industries: Transportation, (Littlebrown & Co., Boston, MA), 1961.

- Huntington, Samuel P., "The Marasmus of the ICC: The Commission, the Railroads, and the Public Interest," Yale Law J., Vol. 61, April 1952.
- Jordan, William A., Airline Regulation in America: Effects and Imperfections, (Johns Hopkins Press, Baltimore, MD), 1970.
- Keeler, Theodore E., "Airline Regulation and Market Performance," Bell J. of Management Sci., Vol. 3, Autumn 1972.
- Keeler, T.E., "On the Economic Impact of Railroad Freight Regulation," Univ. of California, Berkeley, Working Paper No. 52-7601, Sept. 1976.
- Kolko, Gabriel, Railroads and Regulation, (Princeton Univ. Press, Princeton, NJ), 1965.
- MacAvoy, Paul W., The Economic Effects of Regulation: the Trunk-Line Railroad Cartels and the Interstate Commerce Commission Before 1900, (M.I.T. Press, Cambridge, MA), 1965.
- Meyer, et al., The Economics of Competition in the Transportation Industries, (Harvard Univ. Press, Cambridge, MA), 1959.
- Moore, Thomas Gale, Freight Transportation Regulation: Surface Freight and the I.C.C., (American Enterprise Inst., Washington, D.C.), 1972.
- Nelson, Robert A. and William R. Greiner, "The Relevance of the Common Carrier Under Modern Economic Conditions," in Transportation Economics (Columbia Univ. Press for the National Bureau of Econ. Research, New York), 1965.
- Phillips, Almarin (ed.), Promoting Competition in Regulated Markets, (The Brookings Inst., Washington, D.C.), 1975.
- Simpson, Robert W., "A Policy Model for the Airline Industry at the Network Level," Alternative Scenarios for Federal Transportation Policy, Vol. IV, M.I.T., Center for Transportation Studies, January 1977.
- Tarbell, Ida, The History of the Standard Oil Company, (Macmillan, New York), 1904.
- U.S. Senate, Committee on Interstate and Foreign Commerce, National Transportation Policy (The Doyle Report), 1961.
- Williams, Ernst, W., Jr., The Regulation of Rail-Motor Rate Competition, (Harper & Bros., New York), 1958.

APPENDIX A

Government Control of Rates and Entry
in the Rail and Trucking Industries*

* This Appendix was prepared by James Sloss with the assistance of Patricia Hanratty.

I. GOVERNMENT CONTROL OF RAILROAD RATES

A. Control of Railroad Rates

Effective regulation of railroad rates (including classifications, tariffs, rules and practices related thereto) commenced with passage of the Act to Regulate Commerce in 1887. This Act created the Interstate Commerce Commission and stipulated: "All charges made for any service rendered or to be rendered in the transportation of passengers and property... shall be reasonable and just; and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful." The Act further banned undue or unreasonable preference or advantage and undue or unreasonable prejudice or disadvantage to "any person, company, firm, corporation, or locality, or any particular description of traffic."

Other sections of the 1887 Act proscribed charging a higher rate for a shorter than for a longer distance over the same line, in the same direction "under substantially similar circumstances and conditions": required that all rates and fares be published and kept for public inspection and copies filed with the Interstate Commerce Commission; and provided for ten days public notice of any advance in rates. (No advance notice was necessary for a reduction in rates but immediate publication of reductions was obligatory.) Furthermore, it was provided that "It shall be unlawful for such common carrier to charge, demand, collect, or receive from any person or persons a greater or less compensation... than is specified in such published schedule of rates, fares, and charges as may at the time be in force."

The evolution of the regulatory statute over the ensuing 89 years has increased enormously the Federal Government's powers over railroad pricing policies, initially in response to Court decisions which tended

to construe the I.C.C.'s statutory authority narrowly, and more recently due to the Commission's interpretations of the National Transportation Policy in intermodal competitive rate controversies. Even the Railroad Revitalization and Regulatory Reform Act of 1976 which was enacted, inter alia, to relax the I.C.C.'s absolute discretion over railroad management's rate policies emerged from Congress with many conditions attached to the relief from the regulatory controls built up over a period of nine decades.

In brief, the basic pricing philosophy incorporated in the 1887 statute has continued down to the present time despite numerous amendments and augmentations representing, primarily, adjustments dictated by changed endogenous and exogenous circumstances affecting all suppliers of domestic surface transport. A recital of the many revisions of the regulatory statute, the underlying causes of these changes, and their ultimate effects on the carriers has been copiously documented in the transportation literature and will not be repeated in this report except where a particular item contributes to our understanding of the impacts of Federal intervention on the current operating and financial performance of the U.S. railroad industry.

The control of the I.C.C. over railroad rates has been maintained through its statutory authority to prescribe "what will be the just and reasonable individual or joint rate, fare, or charge... or the maximum or minimum, or maximum and minimum, to be charged." Carriers are prohibited from charging a different amount than the rate, fare, or charge so prescribed. This control has been effectuated by the granting to the Commission of authority to suspend any new rate, upon complaint or upon its own initiative, for seven months beyond the time when it would otherwise go into effect. (The changes in the I.C.C.'s jurisdiction over railroad freight rates and in its suspension power brought about in the Railroad Revitalization and Regulatory Reform Act of 1976 are dealt with in

a later section of this report.)

It may be argued that the Commission could and frequently did dictate both the general rate level applicable to the railroad industry as a whole and the level of individual rates on specified commodities between designated origins and destinations. The Federal Judiciary served as the only body to whom decisions of the I.C.C. could be appealed and in many instances, recourse was had to this procedure by a party dissatisfied with the Commission's judgment in a particular case.

It should be observed that, until recent years, the Commission exercised its power over transport prices by means of adversary proceedings evolving from a pricing change initiated by a carrier. This practice placed the agency in a passive posture vis-a-vis railroad pricing policies and little effort was made to formulate broad policy outlines for the guidance of railroad managements in assessing their revenue needs. Hence, many proposals filed for adjustments in the general rate level (usually upward) would be subject to suspension and lengthy hearings before a decision was reached to grant, modify or deny the application.

There have been some changes in the Commission's concept of its role as a policy maker based on investigations inaugurated by the agency unrelated to any specific adversary proceeding. One of the early examples was Docket no. 34013 (Sub-No.1), "Cost Standards in Intermodal Rate Proceedings," announced in February 1969. In its Notice of Proposed Rule Making, the Commission commented as follows: "The issues herein pertain primarily to the determination of cost standards in intermodal rate proceedings. However, the emphasis herein on inherent cost advantages should not be construed as limiting the consideration in future proceedings, where appropriate, of other inherent advantages." An initial decision of the Administrative Law Judge was served on May 7, 1973; the date for filing exceptions thereto was

periodically extended at the request of various respondents and in April 1976 the Commission proposed to discontinue the proceeding owing to railroad cost ascertainment provisions embodied in the Railroad Revitalization and Regulatory Reform Act of 1976 which rendered the investigation academic insofar as it applied to railroads.

As further evidence of this trend, the following comment from the Commission's 87th Annual Report to Congress for Fiscal 1973 is illuminating: "Apart from day-to-day concern with ruling upon the freight rate issues presented for adjudication, the Commission set aside part of its resources for a careful analysis of the ultimate policy direction for this key aspect of regulation." One of these analyses bears the title: Investigation of Railroad Freight Rate Structure (Ex Parte No. 270) and is concerned with the possible self-defeating nature of general rate increases, disparities and distortions in the basic rate structure, uneven effects of general increases on individual railroads, and the apparent lack of railroad incentive to improve service. An individual Commissioner was appointed coordinator to expedite the review and sub-numbered proceedings were established to study the rate structures of specific commodities. One of these proceedings, Sub-No. 4, Investigation of Railroad Freight Rate Structure -- Coal (345 I.C.C. 71), was decided in December 1974, ran to 339 pages and, inter alia, "found that the freight rate structures on coal are, with few exceptions, compensatory and not unreasonably high."

In its 89th Annual Report to Congress for Fiscal 1975, the I.C.C. mentions proposed new procedures to expedite the handling of general increased rate requests by carriers (Ex Parte No. 314). However, the Railroad Revitalization Act of 1976 established new criteria to be observed by the Commission in considering proposals for general rate increases filed by railroads which appear to supersede the revisions contemplated by the Commission in Ex Parte No. 314. Final judgment must await subsequent

clarification of the statute.

An interesting legal test of the extent of the Commission's control over railroad pricing policies developed in connection with its ruling in Ex Parte No. 305, Nationwide Increase of Ten Percent in Freight Rates and Charges, 1974, that 7 per cent of the authorized increase be used for deferred maintenance and delayed capital improvements. The Chessie System took exception to these conditions on two main grounds: (1) It had no deferred maintenance nor delayed capital improvements against which to apply the 7 per cent increase. (2) The Commission lacked statutory powers to impose usage conditions. In April 1975, the U.S. District Court for the eastern district of Virginia upheld the railroad's contention that the I.C.C. had no authority to order a railroad how to spend its revenue. On appeal, in No. 75-420, United States of America, et al. v. Chesapeake & Ohio Railway Co., et al., the Supreme Court, in June 1976, reversed the district court's decision. Holding that the Commission's action in this case was not an invasion of management's prerogatives but a reasonable and direct adjunct of its suspension power, the Supreme Court viewed the conditions imposed by the Commission as "conceptually and functionally different from any attempt to require management action, whether it be of a financial or operational nature." An argument by the railroad's attorney that changes in "The Rule of Rate Making" (Section 15a of the I.C.Act) embodied in the Railroad Revitalization Act of 1976 did not convey the power to the Commission which it had assumed in this proceeding evidently failed to impress the Justices although two dissented from the majority's decision sustaining the Commission's order.

In addition to its consideration of proposals for general rate increases applicable to virtually all classes of freight traffic, the I.C.C. has had continuing responsibility for passing judgment on the lawfulness of

filings of a much more limited scope. Until quite recently, these represented reductions intended to retain traffic threatened with diversion from railroad to truck or water carrier or to recapture business from a competing mode. Among the most important examples of such were the "Big John" case, officially designated Grain in Multiple-Car Shipments -- River Crossings to the South, 318 I.C.C. 641 (1963), 321 I.C.C. 582 (1963), 325 I.C.C. 752 (1965), and the Ingot Molds case, Ingot Molds, Pa. to Steelton, Ky., 323 I.C.C. 758 (1965), 326 I.C.C. 77 (1965). Both cases have been described in this writer's paper entitled "Critical Issues in the Federal Regulation of Railroads and Trucks." Suffice it to state here that the Commission declared the reductions published by the rail carriers unlawful in each case. On appeal, the U.S. Supreme Court reversed the Commission's decision in the Grain case allowing the railroads to compete price-wise with unregulated motor and water carriers but upheld the Commission in the Ingot Molds litigation forcing the railroads to forego the traffic which their reduced rate had regained from a combined barge-truck service.

Owing to the constant pressure of rising costs, recent emphasis in railroad pricing policies has been to seek increases on individual movements, as well as general increases, especially where cost studies indicated that such movements were unremunerative. The I.C.C. has denied some proposals finding in one case that a proposed increase in freight rates for fresh fruits and vegetables moving within the west and between western, eastern, and southern territories was not shown to be just and reasonable. It found, inter alia, that the proposed rates would largely eliminate the use of rail service on this traffic, "with extreme hardship to producers and consumers." (I&S 8944, Fresh Fruits & Vegetables, Transcontinental & Western Points).

Ingot molds figured in another case in which railroads published a

reduced rate on this commodity from origins in Pennsylvania and Ohio to Cypress, Texas, a local station on the Southern Pacific Railroad, 25 miles north of Houston. Barge operators objected to this rate pointing out that that the rate maintained by the S.P. on ex barge traffic from Houston to Cypress greatly exceeded the S.P.'s division on all-rail shipments which it received in interchange from other railroads. In Ingot Molds, Ohio & Pennsylvania to Cypress, Texas, 349 I.C.C. 102, the Commission ordered the reduced rail rate canceled "without prejudice to its republication concurrent with a non-discriminatory rate for the rail portion of a competing barge-rail route." This decision conforms to a previous declaration in Motor Vehicles, Kansas City, Mo. to South West, 332 I.C.C. 615, 625, that "While the Commission recognizes the right of rail carriers to voluntarily reduce their rates to meet carrier and market competition, such rights are not absolute and the exercise thereof must comport with the Act and the national transportation policy."

An interesting decision was announced by the I.C.C. in the case of Great Lakes Ship Owners Association et al. v. Chicago and North Western Railway Company, 341 I.C.C. 272 (1972). Evoking its negative position on "guaranteed" and "Contract" rail rates established in the early 1960's, the Commission ordered the C.& N.W. to cancel an annual minimum tonnage requirement in connection with unit train rates on coal from Elm, Illinois to Sheboygan, Wisconsin. The ship lines complained that the annual minimum tonnage provision precluded their participation and therefore constituted a destructive competitive practice in contravention of the national transportation policy and consequently was unjust and unreasonable. In finding for the complainants, the Commission ordered the annual volume requirement canceled, largely on the reasoning it employed in Contract Rates, Rugs and Carpeting from Amsterdam, N.Y., 313 I.C.C. 247, and Guaranteed Rates, Sault

Ste. Marie, Ontario to Chicago, 315 I.C.C. 311, where tariffs publishing reduced rates were contingent on the shipper's use of rail service for 85 per cent and 90 per cent, respectively, of the involved traffic.

The Commission's decision differentiates the Sheboygan case from its decision in Coal to New York Harbor Area, 311 I.C.C. 355 (1960), in which it approved a reduction of 50 cents per ton on single carload receipts of coal by an electric utility applicable on specific tonnages in excess of a specified base subject to minimum qualifying annual receipts in tons. (Details of these arrangements are set forth in Regulation of Transport Innovation: The ICC and Unit Coal Trains to the East Coast by Paul W. MacAvoy and this writer, published by Random House in 1967.) It is also worth observing that the vast majority of unit train rates on coal effective in 1976 are subject to minimum annual tonnages according to a compilation prepared by one of the country's leading coal producers. One may conjecture what might be the consequences for the railroads, the coal producers and the utilities if the Sheboygan case were to serve as a precedent by which the Commission directed cancellation of all minimum annual tonnages currently attached to unit train rates on bituminous coal.

This apparent inconsistency has been noted in other cases involving reduced rail rates established to meet competition from another mode. To cite one example, in Pig Iron, Buffalo, N.Y. to Chicago, Ill. and Gary, Ind., 315 I.C.C. 601, the Commission held: "Proposed reduced rates are not justified by a mere threat of private vessel competition, and, when measured by common-carrier water costs, are lower than necessary to meet existing water competition." In a later decision bearing the same title, the Commission ruled: "It is not required that carriers which fear diversion of traffic must wait until the diversion is an accomplished fact before they may establish competitive reductions. Where private carriage is imminent,

common carriers should be allowed considerable leeway to meet that competition." 321 I.C.C. 121.

The Commission's long-time practice of deciding each case on the particular facts and circumstances applicable thereto has resulted in general uncertainty as to the lawfulness of any new or revised rate contemplated by a railroad and unquestionably has had a dampening effect on experimentation and innovation in the pricing of railroad freight service.

In the Transportation Act of 1920, the I.C.C. was given authority over railroad minimum rates as a part of the overall plan of fostering the development of a uniformly viable aggregation of railroads in a limited number of systems, thereby overcoming the complications resulting from the application of the same freight rate structure to competing strong and weak lines. It was the intent of Congress, in granting this new power to the Commission, to prevent a railroad from dissipating needed revenues by establishing reduced rates in response to market or other railroad competition. With the growth of barge and truck competition and the subjugation of these modes to federal regulation, the Commission's control over minimum railroad rates was used for an altogether different purpose, namely, to prevent railroads from engaging in destructive competition with these competing modes, a practice proscribed by the national transportation policy declared by Congress in 1940 as a guide to the Commission in adjudicating intermodal disputes.

Again we find inconsistency in the Commission's interpretation of its control over minimum railroad rates. In Routing-Brick-From North Carolina to Ohio, 315 I.C.C. 645, it stated "Under section 15(3) of the Act, rates which fail to provide a compensatory yield cast an undue burden on other traffic and are unjust and unreasonable, and rates and routes which have such a result are not in the public interest." Not too long after the

above quoted finding was issued, a different conclusion was reached in Grain from Pittsburgh, Pa. to Eastern Base Points, 322 I.C.C. 218. "So long as rates as a whole afford railroads just compensation for their overall services to the public, the Commission is not barred from fixing or approving noncompensatory rates for the carriage of some commodities when the public interest is served thereby."

B. The Railroad Revitalization and Regulatory Reform Act of 1976, P.L. 94-210

As the financial situation of the U.S. railroads, especially in the Northeast, worsened during the 1970's, there was a widespread feeling that one cause of this problem was excessive regulation of freight rates and charges. In this period of inflation and spiraling costs of labor, fuel and materials, railroads faced the need for higher revenues by filing successive requests for general rate increases with the I.C.C. Often these increased rates were either suspended by the Commission or postponed resulting in allegations by rail officials that they were being unjustly deprived of funds required to make ends meet. The rate provisions of P.L. 94-210 reflect Congressional intent to remedy this situation and to allow greater managerial discretion in the determination of pricing policies.

A review of the changes in railroad rate regulation embodied in P.L. 94-210 leads to the conclusion that the net effect of this statute on the Commission's authority cannot, at this time, be evaluated with any degree of certainty. It is clear that new time constraints are placed on the Commission in its consideration of proposed general and individual rate revisions but the freedoms allowed to railroad management in adjusting rates are hedged with conditions which could negate railroad pricing initiatives. Some of the more important modifications in

in rate regulation introduced by P.L. 94-210 are set forth below:

- (a) "No rate which contributes or which would contribute to the going concern value of such a carrier shall be found to be unjust or unreasonable, or not shown to be just and reasonable, on the ground that such a rate is below a just or reasonable minimum for the service rendered or to be rendered." A rate which exceeds the variable cost of the proponent carrier shall normally be presumed to contribute to that carrier's going concern value.
- (b) "No rate shall be found to be unjust or unreasonable, or not shown to be just and reasonable, on the ground that such rate exceeds a just and reasonable maximum for the service rendered or to be rendered, unless the Commission has first found that the proponent carrier has market dominance over such service."
- (c) Even a showing of market dominance may not prohibit a rate increase from a level which reduces the going concern value of the proponent carrier to a level which contributes to such going concern value and is otherwise just and reasonable, interpreted as not exceeding the incremental costs of rendering the service to which the rate applies.
- (d) Having made a determination that a carrier does not have market dominance over the service to which a rate applies, the Commission may not suspend any increase in such rate on the ground that the rate when increased exceeds a just or reasonable maximum unless the Commission reverses its prior determination that market dominance does not prevail.

Within one year after date of enactment, the I.C.C. is required to establish expeditious procedures for the promulgation of railroad rates based on seasonal, regional or peak-period demand for rail services designed to level out such peaks, provide added revenues to the railroads, improve freight car utilization, rail traffic volumes, railroad employment and market stability.

The power of the Commission to suspend rate changes is restricted, in the case of a proposed increase unless market dominance has been found to exist or unless the rate change gives evidence of contravening Sections 2,3 or 4 of Part I, I.C.Act. In the case of a decrease, suspension may be justified under any provision of Sections 2,3 or 4 of Part I or following a complaint that the change constitutes an unfair, destructive, or predatory practice "or otherwise undermines competition which is necessary in the public interest." The aforesaid limitations on the Commission's rate suspension power apply only to rate changes "which are not of general applicability to all or substantially all classes of traffic."

The Rule of Rate Making (Section 15a) is amended by the addition of a new paragraph requiring the Commission, in any proceeding involving a proposed increase or decrease in railroad rates, to consider alleged changes in the rate relationships between commodities, ports, points, regions, territories, or other particular descriptions of traffic and claims that the change would adversely affect the competitive position of shippers or consignees served by the railroad proposing the increase or decrease. If alleged

disadvantages are sustained on the record, the Commission must investigate the lawfulness of the change in question.

Problems of definition and interpretation must be resolved before the potential impact of P.L. 94-210 can be assessed. The Commission has already proposed a definition of "market dominance" which has drawn a storm of protest. The Association of American Railroads has attacked the very concept calling it "an unsound and ill-premised approach to determining the absence of effective competition." Similarly, such terms as going concern value, incremental cost ascertainment and peak period pricing may require careful scrutiny before their applicability to railroad pricing procedures can be properly identified. As with all new legislation, only through experience can the effect of the Railroad Revitalization and Regulatory Reform Act of 1976 be measured. The response of the railroad industry as well as that of the Interstate Commerce Commission will ultimately determine the effectiveness of this statute in accomplishing its stated objective to enable this mode of transportation to remain viable in the private sector of our country's economy.

II. FEDERAL CONTROL OF MOTOR CARRIER RATES

A. Introduction

Part I of the Interstate Commerce Act provides for all railroad rates and charges applied on movements in interstate or foreign commerce to be subject to regulation by the Interstate Commerce Commission. This is not true with respect to Part II of the Act dealing with the regulation of the for-hire trucking industry.

The nature of federal control of motor carrier rates varies in concordance with the structure of this industry; hence, it is useful to describe this structure as a means of gaining an understanding of the different degrees of rate regulation applied to the principal components characterizing this mode of transportation named below:

- (1) Interstate, intercity common carriers.
- (2) Interstate, intercity contract carriers.
- (3) Interstate, intercity exempt carriers.
- (4) Intercity private carriers.
- (5) Brokers.

Additional subdivisions of categories such as common carriers of general freight, common carriers of specialized commodities, regular and irregular route common carriers are not relevant in the context of rate regulation since I.C.C. control over rates and charges of all common carriers is pervasive except when these firms are engaged in transportation services subject to the exemptions specified in Section 203 (b) of the Interstate Commerce Act.

Another important distinction between regulation of rail and motor carrier rates has to do with the control of rates for intrastate services.

Under Section 13, paragraph (4) of Part I, the I.C.C., upon finding an intrastate rate causing any undue or unreasonable advantage, preference, or prejudice as between persons or localities in intrastate commerce on the one hand and interstate or foreign commerce on the other hand, or any undue, unreasonable, or unjust discrimination against, or undue burden on, interstate or foreign commerce, is authorized to prescribe a rate or charge which will remove such advantage, preference, prejudice, discrimination, or burden. This authority was originally conferred upon the Commission by the Transportation Act of 1920 and strengthened in the Transportation Act of 1958 and in Section 210 of the Railroad Revitalization and Regulatory Reform Act of 1976.

In the case of motor carrier regulation, however, it is specifically stated in Section 216 (e) of Part II: "That nothing in this part shall empower the Commission to prescribe, or in any manner regulate, the rate, fare, or charge for intrastate transportation, or for any service connected therewith, for the purpose of removing discrimination against interstate commerce or for any other purpose whatever." Consequently, federal control of truck rates as exercised by the Interstate Commerce Commission is strictly confined to interstate and foreign operations leaving each state in a position to regulate movements wholly within the confines of its borders. For large states like Texas, California, and Alaska, this has important ramifications.

Referring to the above outline portraying the structure of the trucking industry, the impact of federal regulation of rates on its respective components may be summarized as follows:

(1) Rate regulation of interstate common carriers is virtually all-inclusive. The Interstate Commerce Act's Section 216, applicable to rates of common carriers of property by motor vehicle, closely resembles the

rate controls provided for railroads in Section 1. Only when engaged in specified forms of transportation covered by exemptions from regulation are common carriers permitted to negotiate rates which are not subject to I.C.C. review or suspension.

(2) In the case of interstate contract carriers, the terms of the Motor Carrier Act of 1935 originally required that only their minimum rates be published and filed with the I.C.C. Under pressure from the common carrier segment of the industry, Congress amended the Act in 1957 to require every contract carrier by motor vehicle "to file with the Commission, publish, and keep open for public inspection, in the form and manner prescribed by the Commission, schedules containing the actual rates or charges of such carrier for transportation of passengers or property in interstate or foreign commerce..." Furthermore, the I.C.C. was given authority to prescribe just and reasonable minimum rates and charges whenever it found an existing minimum rate or charge contravened the national transportation policy or any provision of Part II of the Interstate Commerce Act.

Section 218 (b) contains the following phrase which is indicative of Congressional policy vis à vis contract motor carriage: "Such minimum rate or charge... so prescribed by the Commission shall give no advantage or preference to any such carrier in competition with any common carrier by motor vehicle subject to this part, which the Commission may find to be undue or inconsistent with the public interest and the national transportation policy declared in this Act..." Taken in the context of the definition of a "contract carrier by motor vehicle" set forth in Section 203 (a)(15), it is obvious that present regulations impose strict limitations on this segment of the trucking industry.

(3) Interstate exempt carriers include operators holding no common

carrier certificates or contract carrier permits issued by the I.C.C. who engage exclusively in the hauling of commodities or performing services expressly enumerated in Section 203 (b) of the I.C. Act. This category also covers authorized common and contract motor carriers and private carriers when supplying transportation services exempted from regulatory controls by the above cited section. The most important exemption is that named in subparagraph (6) commonly referred to as the Agricultural Exemption. Since the motor vehicles carrying such products are wholly exempted from economic regulation "if such motor vehicles are not used in carrying any other property, or passengers, for compensation," it follows that rates charged for such transportation are unregulated. Various studies have tended to show that these negotiated rates are less than the regulated rates for comparable service although definitive data supporting this contention have been either quite ancient or of dubious validity. The status of commodities qualifying for exemption from rate control under Section 203 (b)(6) of the Act has changed over time in response to rulings by the Commission, the federal judiciary, and Congress. The most recent status report is contained in the Commission's Administrative Ruling No. 119 revised October 1, 1974. This document lists commodities which are and those which are not exempt from I.C.C. rate control and the source of the determination.

Since regulated carriers will usually resort to soliciting exempt agricultural products to obtain a back-haul for an otherwise empty vehicle, there is a built-in presumption that their rates on such shipments will be very close to short-run marginal costs, especially since they must compete for this traffic with wholly unregulated vehicles of owner-operators whose costs reflect non-union labor, absence of terminal facilities, and avoidance of expenses caused by the regulatory process itself.

(4) Private carriers are totally excluded from economic regulation

both in interstate and intrastate movements. They are, however, restricted by a definition in Section 203 (a)(17) of the I.C. Act to transporting property of which they are owner, lessee, or bailee "in furtherance of any commercial enterprise." Section 203 (c) clarifies this definition by stipulating that no person engaged in any other business enterprise shall "transport property in interstate or foreign commerce for business purposes unless such transportation is within the scope, and in furtherance, of a primary business enterprise (other than transportation) of such person."

Within the limits imposed by the above restriction, private carriers may establish any scale of rates which the management of a given firm chooses to levy and since these are strictly intercorporate transactions, such charges will represent imputed prices based on some cost allocation scheme. When private carriers seek exempt agricultural commodities to generate back-hauls for their equipment, they must set rates which are competitive with for-hire carriers and which cover all additional expenses entailed in performing such service; otherwise, it would be preferable for them to forego a return load.

(5) A broker is defined in the Interstate Commerce Act as a person other than a carrier who sells or offers for sale any transportation subject to Part II or who negotiates, solicits, or advertises himself as selling, providing, furnishing, contracting, or arranging for such transportation. No provision is made for regulating the charges assessed by a broker; however, the Commission is required to regulate brokers by establishing "reasonable requirements with respect to licensing, financial responsibility, accounts, records, reports, operations, and practices of any such person or persons." Section 211 (c) of the Act authorizes the Commission to prescribe reasonable rules and regulations for the protection of shippers to be observed by any person holding a brokerage license but

makes no mention of rates or charges, reinforcing a conclusion that these are not subject to I.C.C. control.

It should also be noted that many brokers are engaged in arranging for the transportation of exempt agricultural commodities. Section 203 (b) provides: "Nothing in this part... shall be construed to include; (6) motor vehicles used in carrying property consisting of ordinary livestock, fish (including shellfish), or agricultural (including horticultural) commodities..." Hence, it may be assumed that those brokers engaged in procuring vehicles for exempt traffic, exclusively, are beyond the reach of the Commission's jurisdiction. In that event, their remuneration, whether based on a percentage of revenue, or otherwise, remains a matter for negotiation between broker and carrier.

It will be observed from the foregoing narration that in assessing the effects of rate regulation applicable to the trucking industry, it is necessary to specify each component of the industry which is being investigated since the application or non-application of federal price control, as well as the scope of such controls differs greatly among the different segments of this mode.

B. Review of Interstate Commerce Commission's Motor Carrier Rate Policies

It has been shown that important segments of the trucking industry are independent of the Interstate Commerce Commission's authority over rates and charges. Figures compiled by the American Trucking Associations, Inc. indicate that over the past 30 years, regulated interstate motor freight carriers have accounted for between 35 and 45 per cent of total intercity ton-miles moving by truck, their estimated share for 1973 being 42 per cent. Referring to the structural breakdown of the industry presented on

ACTION TAKEN BY I.C.C. ON MOTOR CARRIER PROPOSALS CONSIDERED FOR SUSPENSION*

Fiscal Year Ended June 30th	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Suspended in Full	1,290	1,646	1,500	1,414	1,371	1,476	1,327	1,361	1,382	1,336
%	34	42	40	38	41	38	41	36	43	42
Suspended in Part	52	77	63	49	30	59	302	527	139	239
%	02	02	01	01	01	02	09	14	04	08
Not Suspended (Permitted to Be- come Effective)	1,397	1,411	1,439	1,196	1,116	1,335	864	1,115	1,096	1,122
%	37	36	38	33	33	34	27	30	34	35
Otherwise Disposed of (Schedules Rejected, Protest Withdrawn, Schedules Cancelled by Carriers)	1,029	767	788	1,032	827	1,012	732	728	588	487
%	27	20	21	28	25	26	23	20	19	15
TOTAL	3,768	3,901	3,790	3,691	3,394	3,882	3,225	3,731	3,205	3,184
%	100	100	100	100	100	100	100	100	100	100

Source of Data: Annual Reports of the Interstate Commerce Commission

*Previously referred to as "Action Taken on Protested Rate Adjustments"

the first page of this report, only rates of the first two categories -- common and contract carriers -- come under the Commission's jurisdiction. Accordingly, this review of the Agency's rate policies has focused on these divisions.

The I.C.C. is required to take note of all rates, charges, etc. issued by regulated trucking firms having application on interstate services and which, in accordance with Section 217 for common carriers and Section 218 for contract carriers, must be filed with the Commission. In either case, the Commission, on its own initiative or upon complaint of any interested party, may suspend the operation of the proposed rate or charge for as long as seven months pending a hearing concerning its lawfulness. Table 1 shows the action taken by the Commission on motor carrier rate proposals which have either been protested or otherwise considered for suspension over the past ten years. The consistency indicated by this Table relative to the number of cases considered and the type of action taken thereon is quite remarkable; only the recent increase in the number of proposals suspended in part reflects any significant variability.

The policies of the I.C.C. in dealing with the lawfulness of motor carrier rates and charges may be broken down into five distinct classifications and our analysis of these policies has been designed to conform therewith. As a general proposition, only policies announced during the past ten years have been used to gain an awareness of the Commission's interpretations of the regulatory statute.

1. Relationship of motor carrier rates and costs.

Until recently the I.C.C. employed the terms "out-of-pocket cost" and "fully distributed cost" to differentiate between costs which varied with volumes of traffic and those which were independent of volume, respectively. These terms were subsequently changed to "variable costs"

and "fully allocated costs" with non-cost elements of profit and income taxes excluded therefrom (337 I.C.C. 298; 1970). Fully allocated costs would, by inference, include both variable and fixed costs in line with customary microeconomic usage. Decisions rendered prior to 1970 contained the former expressions.

In discussing the role of costs where rates have been established to meet a competitive situation, the Commission has held that the existence of rail competition justified motor carrier rates only slightly in excess of out-of-pocket costs (323 I.C.C. 525). In another reference to competition, the pronouncement was made that the evidence of losses sustained on traffic between a few points was insufficient "in and of itself" to find the assailed rates constituting a destructive competitive practice (325 I.C.C. 175).

Several cases adjudicated by the Interstate Commerce Commission have been concerned, inter alia, with the publication by trucking firms of very low rates to secure a back-haul and a better balance of volume in both directions. On this issue the Commission has been ambivalent, deciding in one proceeding that a round trip movement was "an indivisible unit of production resulting in a joint cost." Hence, the cost of an empty movement is to be born by all revenue freight for the entire round trip (340 I.C.C. 51). In a somewhat earlier report, it was held that where a carrier experienced "a heavy and chronic" imbalance of traffic and a contemplated movement would be in the direction of lightly loaded or empty vehicles, a proposed rate would be compensatory if it exceeded out-of-pocket costs compiled on a one-way basis (335 I.C.C. 792).

2. Preservation of the rate structure.

The Commission has rendered decisions based on its perceived duty to retain the rate structure of the motor freight carriers. In this con-

text, it has ruled that a presumption of unreasonableness attaches to a commodity rate which exceeds the classification while acknowledging that such a presumption may be rebutted by a showing of special circumstances "which justify the abnormality" (335 I.C.C. 586). In another pronouncement it was indicated that a considerable volume of traffic is required before the establishment of a less-than-truckload commodity rate is warranted, which seems to represent an example of putting the cart before the horse (322 I.C.C. 687). This represented a restatement of a previously declared rule "long recognized by the Commission" that, unless exceptional transportation conditions prevailed, l.t.l. shipments should move at class rates (314 I.C.C. 212 and 315 I.C.C.412).

Dealing again with the sacrosanct rate structure, the agency has found that costs are significant in a case involving the lawfulness of an exception basis higher than the classification basis in order to avoid shippers' claims for reparation based on an allegation that such an exception rating could be treated as a violation of Section 216 (b) requiring common carriers of property by motor vehicle to "establish, observe, and enforce just and reasonable rates, charges, and classifications" (323 I.C.C. 29). The "normal" relationship espoused by the Commission and one which has received acceptance over the years is that an exception rating removes the application of a classification rating on the movement in question while a commodity rate removes the application of a class and/or exception rating thereon, the progression, in terms of the level of charges, proceeding downward from classification basis to exception basis to commodity rate. This scheme, in essence, represents the "rate structure."

As recently as July 1976, Division 2 of the I.C.C. issued a report reversing the initial finding of an Administrative Law Judge and finding

the restructuring of class rates by the Central States Motor Freight Bureau affecting minimum charge and L.T.L. shipments to be just and reasonable. Division 2 said in its report that the restructuring was intended to bring rates and charges "more nearly in line with costs and to spread more evenly over the rate structure the burden of producing needed revenues" (352 I.C.C. 502). It should be noted that the proposed rate changes, first published in October 1973, were suspended by the Commission but then allowed to become effective in March 1974 while the investigation continued.

3. Compensativeness of motor carrier charges.

Given authority over minimum charges of common motor carriers of property by Section 216 (e) and of contract carriers by Section 218 (b) of the Interstate Commerce Act, the Commission has been frequently concerned with the compensativeness of trucking company rates despite its declaration that "Power to prescribe minimum rates is used sparingly and then only when it appears necessary to avoid substantial public injury" (329 I.C.C. 61). The following brief excerpts from I.C.C. decisions give evidence of the importance placed by the regulating agency on the remunerativeness of a particular rate schedule: "An affirmative showing of compensativeness is a minimum requirement in meeting the statutory burden of proving that changed rates are lawful (325 I.C.C. 103)." "The carrier using owner-operators has the same burden of proving compensativeness of the revenue retained to cover its costs as it normally has in showing any proposed rate is compensatory (326 I.C.C. 6)."

In a case involving criteria to be used in determining motor carrier rates involving owner-operators, the Commission took the position that inasmuch as contract carriers were in competition with common carriers, there was no basis for distinguishing between the two types where the com-

compensativeness of their rates was in issue (314 I.C.C. 28). A federal district court provided a standard for measuring compensativeness, stating in Middlewest Motor Freight Bureau v. United States: "To be 'compensatory' a rate must equal out-of-pocket costs" (234 Fed. Supp. 151). The Commission, however, has not abided by this standard when intermodal competition was the cause of an adversary proceeding. In the "Ingot Molds" case involving the establishment of a rail rate competitive with a barge-truck rate, the Commission ordered the reduced rail rate cancelled even though the railroad rate exceeded the rail out-of-pocket cost by 42.1 cents per ton (and hence would be deemed compensatory based on the court ruling cited above). This action was predicated on a finding that "On a fully distributed basis, the low-cost mode of transport is barge-truck" (326 I.C.C. 77).

4. Minimum charges of contract carriers.

As in most other areas of decision-making, the Interstate Commerce Commission has not earned high marks for the consistency of its policies. This is clearly recognized in its conclusions respecting the minimum charges of contract motor carriers of property and the relationship of such charges to those of competing common carriers. In the foregoing section, a decision was cited in which the Commission held there was no basis for distinguishing between common and contract carriage "where the compensativeness of their rates was in issue." The apparent need to grant protection to common carriers against aggressive competition provided by contract haulers was given legitimacy by the Federal District Court which concluded that: "The object of permitting contract carriers to recover only their actual rates, neither more nor less, was to equalize competitive opportunities by requiring them to make the same public disclosure of actual rates and charges required of common carriers." A&F Trucking

Corp. v. Liggett Drug Co.(253 Fed.Supp. 699).

Opposing this protectionist policy, the Commission has elsewhere ruled that rates of contract carriers were not necessarily unlawful because they were below those of common carriers for similar transportation; whether or not they were unduly low depended on respondent's operating expense and not on rates of competing common carriers (67 M.C.C. 463). Also, the fact that a contract carrier's minimum rate was lower than those of competing carriers did not mean it was unreasonably low or that its maintenance constituted an unfair or destructive competitive practice (66 M.C.C. 125; 301 I.C.C. 641; 305 I.C.C. 666). A relatively recent expression by the Commission of its contract carrier rate policy proclaimed that rates could be a factor in determining whether a contract carrier would be able to satisfy a shipper's distinct needs as mandated in the definition of a contract carrier in Section 203 (a)(15) of the Interstate Commerce Act (119 M.C.C. 51).

5. Revenue needs and the general rate level.

Ordinarily, the railroad industry assesses its revenue needs for the entire industry and files for a general rate increase to be applied more or less uniformly among all of the nation's rail systems or, at the very least, on a territorial basis. In the case of the trucking industry, each of the numerous rate bureaus files its request for a general increase independently both as to time and amount. This results in a vast number of such proposals to be evaluated and decided by the Commission in a period of inflation such as currently prevails. In order to facilitate the disposition of general rate proposals, the I.C.C. issued a set of rules in New Procedures in Motor Carrier Revenue Proceedings (340 I.C.C. 1) which according to the Commission's 89th Annual Report are accomplishing this objective. The Commission also adopted regulations "designed to assure that the public is fully informed of

proposed carrier actions which have a potential impact on the cost of goods and services." (Ex Parte No. 286: Adequate Notice to the Public of Proposed General Increases in Freight Rates and Passenger Fares, 341 I.C.C. 589; 349 I.C.C. 741.)

In its many considerations of motor carrier requests for general rate increases, the Commission has explained the various elements which must be evaluated in order for it to reach a decision to grant-in-full, grant-in-part, or reject a proposal. For instance, "Information concerning the efficiency of operations of the respondent carriers is important in determining whether present carrier revenues are being protected by carrier efforts to cut costs" (329 I.C.C. 244). "When operating ratios are used to determine revenue needs, evidence of the factors which make up the operating ratios of representative carriers must be submitted" (329 I.C.C. 626). Further, "It is a clear misuse of the operating ratio to... conclude from the bare ratios either that present revenues are insufficient or that **proposed** revenues are justified" (332 I.C.C. 820); and "Elements of profit and income tax are elements of a non-cost character which should be excluded from variable and fully allocated costs" (337 I.C.C. 298).

C. Conclusion

The pricing of motor freight services is an extremely complex procedure. It involves the determination of an individual price for every commodity moving in commerce within a given state as well as between states and to and from foreign countries. Sizes of shipments vary from the very small to the extremely large; from heavy and dense to light and bulky; from short distances of a few miles to several thousand. Costs for a particular movement may vary according to the mixture of commodities available for shipment at a given time and the prospect for balancing

vehicle loads between origin and destination pairs or regions.

Regulation imposes additional complications on those segments of the industry whose prices are subject to the jurisdiction of a State Commission or the Interstate Commerce Commission. The two most serious problems attributable to regulation are inflexibility of the rate structure and smothering price competition through the activities of carrier rate bureaus which have effectively cartelized the regulated common carrier trucking firms.

If carriers were free to adjust prices on very short notice, they should be in a more favorable position to equate their rates to their present and immediately predictable costs, thereby securing a relative equilibrium between demand and supply. The absence of rate bureau procedures would tend to eliminate a further barrier to the attainment of such an equilibrium and should, in the long run, produce a level of charges lower than that prevailing under our present scheme of price control. Great Britain introduced entry control over intercity trucking in 1933 and removed it in 1968 without any disastrous effect on its trucking industry. Yet throughout the period of controlled entry, rates in British trucking service were not regulated. Hence, it may be argued that regardless of any policy decision respecting entry, the removal of government regulation on rates and charges of all components of our own motor freight industry is feasible and should prove in the public interest.

III. GOVERNMENT CONTROL OF ENTRY OF TRANSPORTATION FIRMS

A. ENTRY CONTROLS APPLICABLE TO RAILROADS

1. Controls prior to Transportation Act, 1920

Prior to enactment by Congress of the Transportation Act, 1920, control of entry in the railroad industry rested with the individual states. Most states had enacted laws requiring railroads to procure franchises before commencing construction or engaging in transportation service. Ordinarily, as a condition precedent to securing a franchise, a railroad had to establish proof of the public convenience and necessity of the proposed undertaking. State courts upheld this requirement in a number of instances.¹ In the language of one authority, "The American people have long realized the folly of competitive construction. To prevent such waste many states have acted (by enacting appropriate regulatory measures)."²

Examples of such wasteful duplication included the construction, during the 1880's, of the West Shore Railroad from Weehawken, N.J. to Buffalo, paralleling the New York Central's route and the Nickel Plate's line from Buffalo to Cleveland, Toledo, and Chicago which also followed closely the New York Central's System's trackage between these cities. In order to cope with the competitive threat created by these newly constructed railroads, the Central felt it necessary to acquire control of them thereby protecting its dominant interest in the involved territories. Meanwhile the Central engaged in similar tactics, in-

vading the Pennsylvania Railroad's bituminous coalfields by constructing the Beech Creek Railroad which for most of its 113 mile route directly paralleled a subsidiary of the Pennsylvania.

In the middle 1880's, William K. Vanderbilt, whose family held a controlling interest in the New York Central, together with officers of the Reading Railroad, arranged to finance the building of the South Pennsylvania Railroad in order "to throttle the Pennsylvania in its own territory" by forming a competitive trunk line between Philadelphia and Pittsburgh. Construction of the line was well advanced including the boring of seven tunnels through the Allegheny Mountains when J.P. Morgan brought together the heads of the Central and Pennsylvania in a series of conferences which ultimately resulted in the abandonment of the South Pennsylvania project.³

Ironically, a half-century later, the State of Pennsylvania purchased the right of way of the South Pennsylvania from the Pennsylvania and Baltimore & Ohio railroads and used its graded route and the seven bored tunnels to establish the first segment of the Pennsylvania Turnpike which developed far more competition to the railroads than the almost finished trunk railroad would ever have generated.

It can be seen from these examples that the motives of the sponsors of additional railroad lines during the decade of the 1880's, in which greatest expansion in history of the U.S. railroad network occurred, were not always based on rational prospects as much as on corporate rivalry and economic warfare. Such

practices, which continued into the 20th Century⁴, prompted the U.S. Congress to incorporate in the Transportation Act of 1920, a provision that future enlargements to the railroad network could be undertaken only after a determination by the Interstate Commerce Commission that public convenience and necessity required authorization of the project.

Legal authority for state regulation of railroad entry preceding the assumption of control by the I.C.C. was recognized by the U.S. Supreme Court in a number of decisions. The following excerpts indicate the Court's position on this issue:

"States may authorize the construction of highways, turnpikes, railways and canals between points in the same State and regulate tolls for the use thereof." B & O R.R. V. Md. 88 U.S. (21 Wall) 546. (1874) (emphasis supplied).

"The power of the State by appropriate legislation to provide for the public convenience stands upon the same ground precisely with respect to its effect on commerce as its power to protect the public health, morals or safety." L.S. & M.S. Ry. V. Ohio ex rel. Lawrence, 173 US 285(1898).⁵

"A State may require track connections and facilities for the interchange of cars and traffic at railroad intersections." Wisc. M.& P. R.R. V. Jacobson. 179 US 287 (1900), affirming 71 Minn. 519.⁶

2. Controls After the Transportation Act of 1920

In the Transportation Act of 1920⁷, an entirely new approach to railroad regulation was delineated. The largely restrictive nature of prior federal legislation, especially in the control of rates and fares by the Interstate Commerce Commission, was superseded by a comprehensive scheme of protecting the industry from its own excesses in a variety of ways. Hence, the Commission was given vast new powers over processes which had hereto-

fore been the exclusive prerogative of railroad management, insofar as the federal government was concerned. Included among the Commission's new responsibilities was jurisdiction over minimum rates, issuance of securities, mergers and acquisitions, construction and abandonment of lines.

The U.S. Supreme Court discerned the objectives of this new regulatory policy referring to them explicitly in two decisions, excerpts from which are presented herewith:

"The Transportation Act, 1920, constituted a departure from the previous purposes of the Interstate Commerce Act. It imposed an affirmative duty on the Commission to fix rates and take other important steps to maintain an adequate railway service for the people of the United States." Wisconsin R.R. Comm. V. Chicago, B.&O. R.R. 257 US 563 (1922).

"By the Transportation Act, 1920, Congress undertook to develop and maintain for the people of the United States an adequate railway system. It recognized that preservation of the earning capacity and conservation of the financial resources of the individual carriers is a matter of national concern; that the property employed must be permitted to earn a reasonable return; that the building of unnecessary lines involves a waste of resources and that the burden of this waste may fall upon the public; that competition between carriers may result in harm to the public; and that when a railroad inflicts injury upon its rival it may be the public which ultimately bears the loss, and it sought to prevent such losses." Texas & Pacific Ry. V. G.C.& S.F. Ry., 270 US 266 (1926); Chicago Junction Cases, 264 US 258 (1924); R.R. Comm. of Calif. V. S.P. Cp., 264 US 331 (1924) affirming 190 Cal. 214.

The "Rule of Rate Making" as written into the 1920 Act expressed the underlying philosophy of the new regulatory concept.⁸ This rule required the Commission to use its rate power so that the railroads as a whole, under honest, efficient and economical

management would be able to "earn an aggregate annual net railway operating income equal, as nearly as may be, to a fair return upon the aggregate value of the railway property of such carriers held for and used in the service of transportation."⁹ (The Rule of Rate Making was drastically altered by the Emergency Transportation Act of 1933 and by subsequent legislation and was virtually rewritten in toto by Section 205 of the Railroad Revitalization and Regulatory Reform Act of 1976).

In order to prevent carriers from unnecessarily inflating the value of their rate base on which the fair return was to be allowed, Congress entrusted the I.C.C. with control over new construction and extension of lines. This was accomplished by the addition of paragraphs 18, 19, 20 and 21 to Section 1 of the Interstate Commerce Act. The provisions of these paragraphs remained substantially unchanged from their enactment in 1920 until February 1976 upon the taking effect of the Railroad Revitalization and Regulatory Reform Act of 1976.¹⁰

The requirements of the Transportation Act of 1920 respecting entry required that a railroad must obtain from the Commission "a certificate that the present or future public convenience and necessity require or will require the construction, or operation, or construction and operation, of such additional or extended line of railroad..." An unusual feature of the entry control was a provision whereby the Commission was empowered "to authorize or require by order any carrier by railroad...to provide itself with safe and adequate facilities for

performing as a common carrier its car service as that term is used in this Act, and to extend its line or lines." Congress stipulated that this grant of authority to the Commission could be exercised only when that body found such extension to be reasonably required in the interest of public convenience and necessity or that the expense involved therein would not impair the ability of the carrier to perform its duty to the public.¹² Even so, the delegation of this authority to the regulating agency appears inconsistent with other policies enunciated in the 1920 Act. It imposed on railroad managements the necessity of bearing the risks inherent in extending a line into new territory whereas if its perception of the benefits had justified the extension in question, the carrier could have filed an application under paragraph 18 of Section 1 to build it.

As might be expected, the bestowal upon the Interstate Commerce Commission of control over both voluntary and involuntary extensions of railroad lines gave rise to much litigation before both the Commission and the federal courts. The preponderance of cases involved efforts by one or more carriers to prevent a competitor from invading territory which it had not previously served. As pointed out by the Supreme Court:

"Prior to the statute (Transportation Act, 1920) a carrier could not have maintained a suit to prevent a competitor from building an extension into territory already served by it, the competitor's proposed action not threatening interference with any legal right. No carrier could then demand exemption from honest competition." *Western Pac. Calif. R.R. V. Southern Pac. Co.*, 284 US 47, 51. (1931).

The courts interpreted the entry provisions of the Transportation Act, 1920 as completely altering the relationship be-

tween competing railroads as noted in the previously cited case. For instance: "New construction by an existing carrier might prejudicially affect the public by financially hampering that carrier in performing its function by invading territory already adequately served by causing an increase in the group rates or by other ways." Also: "The theory behind the Transportation Act, 1920, requiring common carriers engaged in interstate commerce to obtain the Commission's permission before extending old lines is that by encouraging and requiring interstate carriers to cut costs, increase their efficiency, and expedite service, the shipping public is benefitted, and cost of transportation reduced."¹³

While innumerable cases have been argued before the I.C.C. involving proposed voluntary line extensions, the following declaration by that agency sums up its general policy in ruling upon such matters. "The general principles to guide the Commission in permitting or requiring extensions of lines are not difficult to establish. Congress has recognized that as to individual carriers the preservation of their earning capacity and conservation of their financial resources is a matter of national concern; that the property employed must be permitted to earn a reasonable return; that the building of unnecessary lines involves waste, the burden of which may fall upon the public and when a railroad inflicts injuries upon its rival, the public may ultimately bear the loss." Construction in Eastern Oregon, 111 ICC 3 (1926).

Many questions have arisen concerning the distinction between new construction or a line extension for which a certificate of public convenience and necessity was required by Section I, paragraph 18 of the Interstate Commerce Act and construction of "spur, industrial, team, switching or side tracks wholly within one state for which no certificate was needed in accordance with Section 1, paragraph 22. The Commission has held in such cases that the final determination of whether or not a track is an extension of line subject to its jurisdiction is for the courts to decide. In a relatively recent federal court ruling, it was held that the "Purpose of Secs. 1 (18) and (22) of the Act requiring that a carrier first obtain approval of the Commission before operating an extension of a railroad line is remedial, and exemption from its sweep should be narrowed and limited to effect the remedy intended." *Colorado & Wyoming Ry. V. Colorado & Southern Ry.*, 469 F(2nd) 483, 485 (1972).

There remains for consideration the interpretation by the Commission and the courts of that provision of the Transportation Act, 1920 granting the I.C.C. power to require involuntary extensions of railroad lines. One citation typifying the policy of the Commission in dealing with most questions of compulsory line extensions contained this pronouncement: "Two conditions must be satisfied before the Commission will require the construction of additional mileage for areas inadequately supplied with railroads, namely (1) that the extensions are required in the public interest, and (2) that expenses incident

thereto will not impair the ability of the affected carriers to perform their duties to the public."¹⁴

One major decision by the I.C.C. directed a subsidiary of the Union Pacific Railroad upon complaint of the Public Service Commission of Oregon to build a 185 mile long extension from Crane on its own line to Crescent Lake on the Southern Pacific. The Commission found this extension meeting the criteria of Section 1 (21); it was reasonably required in the public interest and the expense would not impair the railroad's ability to perform its duty to the public.¹⁵ The U.S. District Court overruled the Commission holding that it had exceeded its authority and this conclusion was affirmed by the Supreme Court.

In its decision, the Supreme Court referred to three separate varieties of extensions: (1) those voluntarily undertaken by a railroad, (2) compulsory extensions within an area the railroad has bound itself to serve, and (3) spur, industrial, team tracks, etc. left within State control. The Court also raised the question of the constitutionality of that provision of the Interstate Commerce Act granting the Commission the authority to require a carrier to extend its line when it would involve an expenditure of many millions of dollars, imposing on the carrier "burdens that are not incident to its engagement." Furthermore, it was held that Paragraph 21 in Section 1 could not be interpreted to embrace the building of what was essentially a new line to reach new territory.¹⁷

B. SUMMARY

Entry controls were originally applied to the railroad industry by the individual states either through their authority to issue franchises or to require a certificate of public convenience and necessity as a condition for engaging in new constructions. These measures were not sufficiently effective to prevent numerous lines from being built for which there was little economic justification and this proliferation of both branch lines and trunk lines created over-capacity throughout many regions of the country as the highway construction and improvement program got underway following enactment of the Federal Highway Act of 1921 which provided matching funds from the U.S. Treasury to finance a system of "federal-aid" highways.

Even before the outbreak of World War I, railroad credit had suffered severely due to the inability of the carriers to earn adequate rates of return to attract investors to purchase their securities. Most lines were already heavily mortgaged and additional funds could be obtained only through the issuance of junior liens paying relatively high interest rates. The proportion of railroad stock paying dividends fell from 65.69% in 1908 to 57.24% in 1920. The average rate on dividend paying stock fell from 8.07% to 6.51%; but the average rate on all stock fell from 5.30% to 3.72%. Much of the blame for the collapse of railroad credit during this period has been placed on the I.C.C. for its unwillingness to allow

the railroads to institute general freight rate increases which had been applied for to keep pace with rising costs of operation and improvements made necessary by continuous increases in passenger and freight traffic.

When the railroads were returned to private managements following the federal take-over in 1917, it was the view of Congress that the Commission should rectify the pre-war situation by assuming a positive and comprehensive role in the regulatory process. It was the belief of Congress that one source of the decline of railroad credit had been the needless construction of new lines and the excessive competition resulting therefrom. Although the interpretations of the Commission and the Courts attribute the entry controls imposed by the Transportation Act, 1920 to the need to eliminate wasteful competition, it may be argued that the entry requirements viewed in the context of other provisions of that Act, especially those requiring the Commission to formulate a grand scheme for the consolidation of all railroads into a limited number of equally balanced systems¹⁹ were intended to diminish competition generally throughout the industry.

The anticipated impact of curbing intra-industry competition through the many "remedies" incorporated in the 1920 Act were frustrated to a large extent by the growth of highway competition commencing in the late 1920's and by the Depression of the 1930's. In consequence of these developments, the control of entry into the railroad industry became subordinate to the control of abandonments since the decline in passenger and freight volumes caused by these events offered few incentives for new railroad

construction or extension. Exceptions to this general situation have been lines needed to serve new industries or natural resource deposits or to improve right-of-way alignments such as reductions in grades, curves or distances which have been carried on down to the present time. The competitive effect of such extensions have been minimal.²⁰

The entry provisions in paragraphs (19), (20), (21) and (22) of Section 1 of the Interstate Commerce Act were repealed by Section 801.(b) of the Railroad Revitalization and Regulatory Reform Act of 1976. All legislation relating to new construction or extension of lines was incorporated by the 1976 Act in a completely redrafted Section 1(18) of the Interstate Commerce Act.

Among the significant changes resulting from this revision were the following:

- (a) A separation of the statutory provisions covering extensions of service from those relating to discontinuance or abandonment of rail service.
- (b) The Commission, in issuing a certificate for an extension of service must hereafter declare "that the present or future public convenience and necessity require or will be enhanced by the construction and operation of such extended or additional line of railroad."²¹
- (c) The power of the Commission to require a railroad to extend its line has been deleted leaving it only with the right to authorize such an extension. The condition in the former Section 1(21) that an extension would not

be allowed unless the Commission found that the expense involved would not impair the ability of the carrier to perform its obligations to the public has been retained in the revised Section 1(18).

It may be observed from the foregoing that except for the removal of the Commission's ability to require an extension of a railroad's line, no substantive changes in the statute governing entry have been accomplished by the Railroad Revitalization and Regulatory Reform Act of 1976, Public Law 94-210.

NOTES

1. Vanderblue, H.B. and K.F. Burgess, Railroads: Rates - Service - Management, New York: The MacMillan Company, 1924, p.294. A number of state cases are cited in footnote 1.
2. Miller, S.L., Inland Transportation: Principles and Policies, New York: McGraw Hill Book Co., Inc., 1933, p.176.
3. For a description of these events see: Burgess, G.H. and M.C. Kennedy, Centennial History of the Pennsylvania Railroad Company, Philadelphia, Pennsylvania Railroad, 1949, pp.408-12.
4. Duplication examples from the early 20th Century were the 928 mile long Western Pacific from Salt Lake City to San Francisco and the 1,482 mile extension of the Chicago, Milwaukee & St. Paul from Aberdeen, S.D. to Seattle.
5. See Vanderblue and Burgess, op.cit., pp.241-242. The Supreme Court subsequently reversed the doctrine espoused in this case.
6. Congress, in the Hepburn Act, 1906, placed jurisdiction over track connections under the Interstate Commerce Commission. The relevant provisions are contained in Section 1, paragraph 9 of the Act.
7. 66th Congress, 2nd Session, Public Act No. 152.
8. Section 15a.
9. Ibid, paragraph 2.
10. Section 402, Transportation Act, 1920; Public Law 94-210, Title VIII.
11. Section 1, Paragraph 21. Emphasis supplied.
12. Ibid.
13. Missouri-Kansas-Texas R.R. V. Northern Oklahoma Rys., 25 Fed.(2nd) 689(1928); certiorari denied, 278 US 610 (1928); M.P.R.R. V. U.P. Ry. 60 Fed.(2nd)126, 127(1931).
14. Cooke V. C.B.&Q.R.Co., 66 ICC 452(1922); Ridge Coal Mining Co. V. Missouri Pac. R.R., 62 ICC 259 (1921); Construction of lines in Eastern Oregon, 111 ICC 3,14(1926); Los Angeles Passenger Terminal Cases, 100 ICC 421(1925) and 142 ICC 489 (1928), order sustained 280 US 52(1929) which reversed 34 Fed.(2nd) 288; Gunderson V. C.M.&St.P. Ry., 91 ICC 702 (1922).

15. Construction of Extension by O.-W. R.R. & Nav. Co., 86 ICC 264(1924); Public Service Commission of Oregon V. Central Pac. Ry. Co., 159 ICC 630(1929).
16. Oregon-Washington R. & Nav. Co. V. U.S., 47 Fed.(2nd)250 (1931), affirmed in Interstate Commerce Commission V. Oregon-Washington R. Co. 288 US 14(1933). For a detailed account of these proceedings see Sharfman, I.L. The Interstate Commerce Commission, Part Three, Vol. 4, New York: The Commonwealth Fund, 1935, pp.373-385.
17. 288 US 14, op.cit., p.35 et seq., pp.41-42.
18. Vanderblue and Burgess, op.cit., p.313.
19. Section 5, Paragraph 4. Repealed by the Transportation Act of 1940.
20. A recent proceeding involved applications by the Burlington Northern, Inc. and the Chicago & North Western Transportation Co. to build and operate separate parallel lines through the Powder River Basis of Wyoming. Instead, the I.C.C. authorized the two companies to build and operate a 112.5 mile joint line. Report, certificate and order issued January 26, 1976, Finance Docket No. 27579 reported in Traffic World, February 2, 1976, p.31.
21. Emphasis supplied.

IV. Entry Regulations Applicable to Motor Carriers of Property

A. Regulation Prior to Motor Carrier Act of 1935

It was not until 1935 that the federal government assumed responsibility for the regulation of motor carrier transportation. Prior to this legislation the individual states were responsible for such control of the industry as existed. Even with the implementation of the Motor Carrier Act the states have continued to oversee motor freight carrier operations within their borders, so that today only Vermont, New Jersey and Delaware do not have such provisions in their statutes.

Since the early days of the trucking industry, the states argued for its regulation on the basis that trucks utilized state owned highways. During the 1920's the states attempted to extend their regulation of motor carriers to interstate transportation, but they were prohibited from such regulation by a U.S. Supreme Court decision in 1925 , holding that this was the exclusive prerogative of Congress.

In 1914 states began motor transport regulation by interpreting existing public utility laws as applying to motor carriers. This was first done in Pennsylvania and Illinois by extending the jurisdiction of their Public Service Commissions. The majority of state regulation, however, was done through the enactment of specific statutes. By 1924 twenty-six states had some form of control over the industry. The extent of regulation in these states varied with several states regulating only passenger vehicles. With the exception of interstate transportation the Courts have acknowledged state regulatory rights as a valid exercise of the state police power.

In granting entry into the trucking industry the state required proof of public convenience and necessity. The main concern of the

agencies regulating entry was that adequate and dependable service be provided to shippers. To insure such service the states also considered the qualifications of the applicants in light of their financial responsibility, fitness, experience, prior operations, and the effect new service would have on existing transportation facilities. In considering the last point, improvement of service was not sufficient proof of public convenience and necessity. Consequently the states tended to protect existing carriers from competition.

Originally the states regulated only common carriers, but during the 1920's they attempted to extend regulation to contract carriers as well. The need for this extension of power came about as a result of attempts by truckers to avoid regulation through declaring contract status. On several occasions the Supreme Court thwarted state ventures at contract carrier regulation. In 1931, Texas succeeded in acquiring Court approval of its control over contract carriers. Other states patterned new legislation after the Texas statutes and eventually brought intrastate operating of this sector of the industry under regulation.

After the Buck and Bush decisions of 1925 the states granted certificates or permits to all carriers involved in interstate transportation. Consequently, another means by which to avoid state regulation was open to truckers who wished to extend their businesses over state lines. The need for federal regulation of commercial motor transport became increasingly apparent. The states clamored for such regulation and eventually the Interstate Commerce Commission joined in their petitions.

B. The Motor Carrier Act of 1935: Background

The demand for federal regulation of motor carriers began in 1925 after the Duke decision which forbade states to regulate interstate trucking. Initially, the state regulatory bodies sponsored the legislation. The ensuing ten years saw a number of other interested parties join the state commissions including the competitive transport agencies, organized labor, the larger motor carriers, and eventually the Interstate Commerce Commission. The I.C.C. did not, at first, see the need for the regulation of property transported by truck, though it did request in 1928 that passenger vehicles be regulated:

"While experience may show that the interstate transportation of property by motor vehicles operating as common carriers... should be regulated, there does not appear to be at this time public need therefore...Regulation of interstate commerce by motor vehicles operating as common carriers of passengers... should be provided for by law..."

By 1932, however, the Commission had come to the conclusion that:

"Federal legislation relating to the regulation of motor vehicles...engaged in interstate commerce is desirable in the public interest."

The Commission went on to recommend appropriate legislation.

In 1934 Joseph Eastman, the Federal Coordinator of Transportation, outlined the need for legislation in his report to Congress. This report described the trucking industry as "...disorganized and much of it is in an economically unsound condition." It went on to suggest that "...a partial and incomplete system of regulation...will not work...The transportation system must be knit together and coordinated. This can

only be done under the guiding hand of the Federal Government." The Eastman report was the basis for the Motor Carrier Act of 1935.

Also supporting federal regulation of the trucking industry were the railroads, and relatively well-entrenched trucking firms who shared a common interest in limiting competition - especially the uncontrolled entry of new firms into the industry. Organized labor also favored regulation since this would be expected to provide a stabilizing influence on employment and would facilitate union organizing efforts. The event which caused the trucking industry's trade association to support comprehensive federal regulation was the Schechter decision invalidating the National Industrial Recovery Act under which the industry had developed a degree of self-regulation in a government approved program to limit competition and prevent indiscriminate price cutting.

Among the principal opponents of truck regulation by a federal agency were small motor carriers, some of whom owned only a single vehicle. The relatively low capital investment required to enter the trucking business and the opportunity to engage in an occupation despite the widespread unemployment created by the Depression attracted many individuals to enter the field. Inadequate business experience, complete disregard of relevant costs and fierce price competition resulted in the bankruptcy of many of these concerns and produced the "chaos" referred to by the Federal Coordinator. Nevertheless, these small operators feared that regulation would eliminate them and that intercity freight transportation would become the exclusive preserve of the railroads and large truck lines; they also were persuaded that if the Interstate Commerce Commission were placed in control of the trucking industry, it would suffer

from a pro-railroad bias on the part of that agency.

Agricultural interests also opposed federal regulation due to their dependence on relatively small operators and the seasonal nature of their transportation requirements. It was their belief that regulation of entry and rates would harm producers of agricultural products by denying them an adequate supply of vehicles to move their crops at harvest time and lead to higher transport charges which they would have to absorb.

C. Motor Carrier Act, 1935

As the Motor Carrier Act of 1935 was finally drafted, the concerns of these divergent groups were largely accommodated. The decision to entrust administration and enforcement of the Act to the Interstate Commerce Commission pleased proponents of regulation. A provision for "Grandfather Rights" authorizing motor carriers performing service when the Act was passed to continue such operations and a broad exemption from economic regulation for agricultural haulers met the objections of many groups originally antagonistic toward this legislation. In this fashion, considerable liberality over entry into interstate trucking was incorporated in the statute, as of the time it took effect; however, the opportunities for future entrants of other than carriers of agricultural commodities were effectively limited by certification and permit requirements applicable to common and contract haulers, respectively.

The problem of railroad domination of the trucking industry as a possible consequence of federal regulation was dealt with in two ways.

Firstly, a declaration of policy was embodied in the Motor Carrier Act expressing the intent of Congress that regulation of motor carriers should "recognize and preserve the inherent advantages of...such transportation" and "promote adequate, economical and efficient service by motor carriers." Secondly, special restrictions were placed on entry of railroads into the trucking field through a provision that in merger or acquisition proceedings, if a railroad "is an applicant in the case of any such proposed transaction involving a motor carrier, the Commission shall not enter an order unless it finds that the transaction proposed will be consistent with the public interest and will enable such carrier to use service by motor vehicle to public advantage in its operations and will not unduly restrain competition."

Entry provisions provided in the Motor Carrier Act established specific criteria for different types of motor freight service. These varied according to the particular category designated below:

- (1) Common carriers of property by motor vehicle
- (2) Contract carriers of property by motor vehicle
- (3) Private carriers of property by motor vehicle
- (4) Brokers

Other sub-categories of the trucking industry included the following:

- (1) Exempt agricultural carriers
- (2) Regular route common carriers
- (3) Irregular route common carriers
- (4) Owner-operators of motor freight vehicles
- (5) Motor vehicle lessors
- (6) Motor carriers of general commodities
- (7) Motor carriers of specialized commodities

These sub-categories were, in part, covered by the entry provisions set forth in the regulatory statute and in part by interpretations of the statute by the Interstate Commerce Commission and the Federal Courts.

Entry requirements embodied in the Act ranged from highly restrictive in the case of regular route common carriers to a complete freedom from economic regulation, including entry controls, for private carriers and haulers of exempt agricultural products. Rules applicable to common and contract interstate trucking firms and to motor freight brokers were defined in the Act; modifications of these rules applicable to sub-categories were usually established by the Commission in the course of adversary or Ex Parte proceedings. Such modifications have greatly expanded the distinction between "regular-route" and "irregular-route" carriers, a distinction mentioned only casually in the regulatory statute.

In designating the commodities, origins and destinations and actual highways to be served by regular-route carriers, and territories to be served by irregular-route carriers in their certificates, the I.C.C. has established boundaries limiting the operating authorities of trucking firms subject to its jurisdiction and forcing firms desirous of enlarging the scope of their services to apply to the Commission for the requisite approval. Thus, entry of existing firms into new markets is subject to the same procedures as would govern in the case of a completely new entrant with no prior record of providing service.

The Interstate Commerce Act's provisions regarding entry are framed in such language as to create a presumption that a grant of new

or extended operating authority shall be the exception rather than the rule. For common carriers it declares: "...a certificate shall be issued to any qualified applicant therefor, authorizing the whole or any part of the operations covered by the application, if it is found that the applicant is fit, willing and able properly to perform the service proposed...and that the proposed service...is or will be required by the present or future public convenience and necessity; otherwise such application shall be denied." Substantially, similar wording governs the issuance of a contract carrier permit and a brokerage license.

D. Interpretations of the Entry Provisions in the Regulatory Statute

An early case before the Commission involved an application for a certificate to transport general commodities over regular routes between San Antonio and Houston, Texas. The application was denied on a finding that 12 shipper witnesses testified that existing motor common carrier and railroad service between the two cities was satisfactory and adequate to meet their transportation requirements. Quoting from this decision: "The burden of proof is upon applicant to show affirmatively that the proposed operation would serve a useful public purpose responsive to a public demand or need and that the public need cannot or will not be met as well by the existing carrier."

In reviewing decisions of the I.C.C. dealing with motor carriers of property applications for certificates of public convenience and necessity during the twenty year period following passage of the Motor Carrier Act, Auerbach and Nathanson have pointed out the difficulty in evaluating the

degree of consistency shown by the Commission in this area. They refer to a case in which the U.S. Supreme Court, in a 5 to 4 opinion, set aside an order of the I.C.C. which appeared inconsistent with its prior decisions. Other orders are cited which indicate that in this early period of truck regulation, no clear-cut policy regarding entry prevailed.

As regards entry into contract carriage, the original terms of the Motor Carrier Act of 1935 were so completely altered in 1957 that neither I.C.C. decisions nor Court rulings issued before that year would represent the current situation. No changes have been made in the law covering the issuance of brokerage licenses since 1940 and very few I.C.C. proceedings have involved brokerage firms arranging for freight transportation services on behalf of motor carriers.

In recent years, the Interstate Commerce Commission has used its authority over operating rights of trucking firms to maintain what it regards as Congressional intent "that entry into for-hire transportation in interstate or foreign commerce be monitored in order to foster a balanced, stable and responsive national system of surface transportation upon which the public may depend." Further; "Entry control is the best and most practicable and effective means yet devised by which regulated carriers may be required to fulfill their common carrier obligations to the public."

Dealing with the interpretation of the operating rights held by an individual carrier, the I.C.C. has determined the scope of "groceries and grocery store supplies, food products, scrap materials, and carbonated or uncarbonated beverages." A motor carrier authorized to transport

passenger automobiles was permitted to haul Volkswagon minibuses and similar vans but not a motor home. However, carriers authorized to transport motor vehicles or recreational vehicles were allowed to also transport motor homes. Equally complex authorities have involved the use of superhighways by regular route motor common carriers whose original certificates were issued before the Interstate Highway System was begun.

In brief, it is evident that the Commission uses its Congressional grant of power over entry into the for-hire trucking business to determine who may engage lawfully in this activity and under what specific conditions and limitations.

Entry provisions applicable to motor contract carriers of property are governed by the revisions in Part II of the I.C. Act approved by Congress in 1957. The new definition of a contract carrier by motor vehicle applies to a firm which engages in transportation "under continuing contracts with one person or a limited number of persons either (a) for the furnishing of transportation services through the assignment of motor vehicles for a continuing period of time to the exclusive use of each person served or (b) for the furnishing of transportation services designed to meet the distinct need of each individual customer."

Much litigation has concerned the proper scope of motor contract carriage of property. In 1971, the I.C.C. instituted a rulemaking proceeding to reconsider its 32-year old position regarding the criteria for entering into contract carriage. In the words of the Commission, "Although we are generally liberal with respect to the granting of contract carrier applications, some have been denied where applicant and

shipper failed to describe in detail just how, where and to what extent the proposed service would be used..." "The total number of shippers to be served by contract carrier affiliates must be considered in determining whether the proposed operation will enable (contract) carrier to serve more than a limited number of persons."

It has been pointed out in an intensive analysis of economies of scale in the trucking industry that any such economies are presumably licensing economies due to economies of size in the regulatory process. It is postulated that firm size may differentiate the demand for operating rights whereby large carriers may on the average obtain routes with characteristics contributing most to higher capacity utilization." Under this set of circumstances, it has been argued that entry regulations tend to encourage concentration in the trucking industry through a system which favors large firms over small ones in the granting of new route authorizations as well as facilitating the expansion of large firms through mergers or purchase of operating rights from another carrier.

The issuance of operating rights to a railroad or railroad affiliate presents special problems due to the previously mentioned strictures originally incorporated in Section 213 (a) of the Motor Carrier Act of 1935 and carried forward in Part I of the Interstate Commerce Act. These "safeguards" against railroad domination of the trucking industry were specifically directed at mergers or acquisitions of independent motor carriers by railroad interests as may be observed from their inclusion in Section 5 of the Act dealing with consolidations. In a series of I.C.C. and U.S. Supreme Court decisions, it was held that the Commission also possessed the necessary authority to impose restrictions on certificates

granted to railroad affiliated motor truck services under Section 212 (a), Part II, Interstate Commerce Act and the National Transportation Policy. While five major restrictions were commonly placed on such operations, the two most important have been "a prior or subsequent rail-haul restriction" and "a key-point" restriction.

Over the years, a number of exceptions have been authorized by the I.C.C. to its limitations on the operations of rail controlled trucking facilities in addition to unrestricted rights possessed by certain carriers under the grandfather clause. The principal justification for relief from restrictions has been the lack of reasonably adequate service on the part of independent operators. Describing the effects of the statutory policy relating to the performance of truck services by railroads, one member of that industry has commented: "This use of substitute highway-for-rail service is historically important because it is the first viable example of true, integrated transportation. Unfortunately, because it was a new concept and an unknown quantity, the Interstate Commerce Commission, the Courts and Congress viewed it with apprehension...What could have been a new dimension in transportation was smothered in a bundle of restrictions which, so far, have successfully prevented the full development of the potential."

Many questions have been raised by economists and public officials about the wisdom of perpetuating the present scheme of regulation applicable to the U.S. interstate trucking industry. Studies of trucking performance in the United States and other countries have provided substantial evidence that our present regulatory framework results in high-

er costs to shippers than would be charged in the absence of such comprehensive control over entry and rates in this industry. While various quantitative estimates have been developed of the extra transport charges attributable to truck regulation, it has been difficult to establish a distinction between those premiums arising from entry controls and those due to rate regulation. Since "successful" regulation encompasses both entry and rate controls, it seems unnecessary to attempt a breakdown whereby the costs to shippers imposed by truck regulation would be allocated among these two elements.

A drastic revision of regulatory policy applicable to the motor carrier industry was proposed last year by the U.S. Department of Transportation and incorporated in draft legislation submitted to Congress. The principal changes affecting entry contained in the D.O.T.'s proposal are set forth below:

- (1) Prohibit the I.C.C. from considering the adequacy of existing service or the effect of proposed entry on competitors when evaluating applications for motor carrier authority.
- (2) Require the I.C.C. to give favorable weight to any application for authority if the service proposed would result in lower rates, greater efficiency and better service.
- (3) Require the I.C.C. to issue an operating certificate if the applicant is fit, willing and able and if the revenue to flow from the proposed service will cover the actual costs of the service.

Any change in the present federal regulatory format is vehemently opposed by the trucking industry. Allied with the industry in opposing regulatory reform are the Teamsters Union and the Interstate Commerce

Commission. The threatened dismantling of federal regulation of surface transportation would, according to industry spokesmen, "create economic chaos" and "destroy essential stability." The industry pledged "total opposition to the Administration's proposals to dimember the present regulatory structure." The chairman of the I.C.C. has been quoted as firmly opposing the Administration's trucking proposals as "unwarranted" and has claimed they will prove disadvantageous to surface transportation and the national well-being.

Anxiety as to the financial effects of eliminating entry controls has been expressed on several occasions by banking officials. Certain banks have major interests in trucking services through loans on equipment and other assests and through advances against trucking company accounts receivable. These individuals are concerned about the consequences of relaxed entry restrictions on motor carrier balance sheets. These presently show as assets intangible property including "organization, franchises, and permits" (but not I.C.C. granted certificates or permits) and "other intangible property." The excess price paid by one company in acquiring another above the value of the purchased company's tangible assets would ordinarily be included in this latter account.

Justification for the financial community's concern may be seen in the fact that the total value of intangible assets of all Class I motor carriers of property engaged in intercity service in 1972 amounted to a net figure of \$352 million. On the liability side of these carrier's balance sheets, total long term debt amounted on December 31, 1972 to \$1.7 billion. It is impossible to ascertain the impact of regulatory

changes liberalizing present entry restrictions on motor carrier finances but it may be inferred that a realistic opening of opportunity to engage in this business, as contemplated in the Administration's legislative proposal of last November, could force some substantial changes in the value of intangible assets and in the attractiveness to investors of trucking industry equities and debt. The degree to which such considerations might lead to financial instability can only be a matter of speculation unless and until Congress takes affirmative action to liberalize conditions of entry into for-hire motor freight transport service.

Meanwhile, it appears likely that no early decision will be reached by the federal law-makers on whether or not to move on the Administration's proposed regulatory reforms in view of the many forces opposing any changes in the present status of truck regulation. Only time and countervailing political forces will determine the ultimate course of legislation intended to relax all or some portion of the existing entry provisions contained in Part II of the Interstate Commerce Act.

APPENDIX B

Government Control of Rates and Entry
in the Air Industry^{*}

^{*}This Appendix was prepared by Joseph F. Vittek, Jr.

I. Fare Policy of the CAB

Prior to the enactment of the Civil Aeronautics Act of 1938, carriers were free to set their own fares for passenger and freight traffic although mail rates were set by various contract/bid techniques. The major debates between carriers and government were how mail compensation should be calculated and to what extent the government mail pay should offset losses from other operations.

A. General Fare Policy

After the enactment of the Act, the primary concern of the CAB continued to be mail compensation and its inherent subsidy-related issues. As far as passenger fares, the major effort was to develop, compile and publish uniform tariffs.

When problems were discovered, they were handled in an informal way. During the first year of its existence, the agency started a staff investigation into whether rates were "reasonable and non-discriminatory." The Second Annual Report announces that "As a result of this study, many obvious inconsistencies and inequalities in fares and rates are being adjusted informally with the carriers." (p. 8)

This same informal approach has been used several times by the CAB. In 1947, it called the carriers to a conference where it recommended a general fare increase to offset falling earnings (and rising subsidy bills). Informal fare studies were completed in house and circulated to carriers in 1947, 1954, and 1967. A series of informal meetings held in the late 1960s led to rate adjustments designed to increase yield. This last rate increase was challenged by Congressman Moss

and 31 other Members of Congress. The Court held the informal meetings amounted to a rule-making proceeding and, because it had not complied with the Administrative Procedure Act, it was illegal. Much has been made of this "illegal action" by the CAB but in fact it was a continuation of practices started in the early days of the agency.

Much to the CAB's credit, it refused in the 1950s to grant anti-trust immunity to the carriers to discuss rate and fare matters, thus preventing the formulation of rate bureaus in aviation.

Interspersed with the periods of general encouragement of fare increases, the CAB went through stages of limiting fares. In 1943, it announced a 10% overall fare decrease because of high wartime profits unless the carriers could show cause why it should not take place. Most of the carriers responded by reducing fares without further proceedings. From 1954 to 1957, a strict hold the line policy was enforced and all requested fare increases were denied.

In short, general fare policy has fluctuated from restraint on to encouragement of fare increases. In either case, the measure has almost always been carrier earnings and not concern over fare levels to the public.

B. Discount Fare Policy

While the CAB's general policy has been to set the general fare level high enough to give "adequate" earnings and lower subsidies, it simultaneously actively promotes discount fares and experiments. (This has been restrained somewhat since the DPFI, discussed below.)

When the CAB took control over the airlines in 1938, a number of discount plans were already in effect. There was a 15% discount

for passengers who flew often through the Air Travel Card Plan. A deposit of several hundred dollars was required. Government employees also received a 15% discount and reduced fares for wives and children were common. The CAB's planned investigation of these practices to determine if they were discriminatory was halted by the War when all discounts were terminated.

Under CAB pressure, many of these discount plans were reintroduced after the War. In particular, the CAB actively encouraged the carriers to introduce and promote coach travel in the late 40s and early 50s while at the same time encouraging carriers to raise first class rates.

Apparently, the CAB has always recognized that two travel markets for air travel exist and that different policies and prices are needed to maximize the returns from each.

C. The Use of Minimum Fares

Although the CAB has the authority to set minimum fares, it has rarely used it (in contrast with the ICC). The first instance was in the late 1940s when the newly certified all-cargo carriers and the existing carriers started undercutting each other's rates. The CAB stepped in and set minimums to protect the all-cargo carriers.

The second instance also occurred in the late 1940s when coach fares were encouraged. The CAB established minimums of 4¢/passenger-mile as compared to about 6¢ for first class. The justification was to prevent carriers from cutting rates too quickly before the actual amount of traffic diverted or generated could be determined. The CAB was afraid the carriers' enthusiasm would increase the subsidy bill.

II. Entry into the U.S. Civil Aviation Industry

A. Entry Prior to the Civil Aeronautics Act of 1938

The federal government has always controlled entry into the U.S. civil aviation industry, although direct controls were only imposed by the 1938 Act. Prior to that time, entry was indirectly controlled through the award of air mail contracts without which a fledgling airline could not survive.

1. Kelly Act of 1925. Prior to the Kelly Act, which provided for the carriage of mail by private airlines under contract to the government, there was no airline industry to speak of in the United States. The government provided its own scheduled air mail services and private operators were limited to short hops and sightseeing or barnstorming operations.

Although not required by the Kelly Act, the Postmaster let the first air mail contracts after competition bids, which was to set the pattern for the next 13 years. The terms of payment were not very attractive and industry response was not enthusiastic. Also, companies were reluctant to bid on long routes because it was unclear who would operate and pay for the needed navigation facilities. Of the eight routes up for bid, only five were awarded and these, significantly, to the forerunners of today's American, United and TWA.

Although there were several amendments to the Kelly Act between 1925 and 1930, the results were not totally satisfactory to the government or the carriers. The subsidy bill rose steadily but with little resulting industry stability. The small aircraft needed to minimize

air mail costs were uneconomical for passenger carriage and, as a result, few airlines arose other than the mail carriers supported by the government.

2. Watres Act of 1930. The aviation system that evolved under the Kelly Act was an uncoordinated hodgepodge of airmail routes tacked together. Most of these routes and the small airlines that originally flew them had been absorbed into three major holding companies-- Aviation Corporation (American Airlines); North American Aviation (TWA, Eastern), originally put together by financier C. M. Keys and ultimately controlled by General Motors; and United Aircraft and Transport (United), built around Boeing and other manufacturing interests. It was in the interest of both the government and these large companies to change the structure of the industry. The result was the Watres Act which changed the basis of air mail pay, creating a direct but hidden subsidy program and giving great powers to the Postmaster General to set rates and extend and consolidate routes.

Postmaster Walter Brown used his new powers to encourage the large operators and protect them from the small, independent airlines that started to emerge in the early 1930s. Brown has been alternately considered a man of great vision and a corrupt politician. Although he may not have violated the letter of the law, his tactics clearly were contrary to the spirit of the law and led to the great air mail scandal of 1934.^{1/}

^{1/}In retrospect, the "scandal" may have been the almost single-handed creation of Senator Hugo Black to further his political ambitions. See Arthur M. Schlesinger, Jr.'s The Coming of the New Deal, Houghton-Mifflin, 1959.

Brown did not see his actions as corrupt or illegal. In his words,

... We were not buying peanuts and pencils and pig iron; we were buying a service that was highly specialized and exceedingly hazardous, and that there was no sense in taking this government's money and dishing it out...to every little fellow that was flying around the map and was not going to do anything... to develop aviation in the broad sense. But the thing to do was to spend that money so that, if possible, we could develop...some people who would compete with each other and bring their aeronautical industry up to a point where it could finally sustain itself. Helping some little fellow make good his losses for a few years and have him no further along than when he started--there was nothing in that...[W]hat I was trying to do was to get somebody with a big enough personnel, with enough management and money back of it to test this thing out and see whether it was possible to get an air transport company that could live on its own, then there would be plenty of competition.^{2/}

Brown's actions defined the basic structure of the U.S. airline industry and the resulting political turmoil paved the way for the passage of the Civil Aeronautics Act of 1938. The Watres Act itself and Brown's interpretation of it encouraged large operators at the expense of the small independent. But, although barriers to entry to mail carriage were low, barriers to economic passenger service were high and it is doubtful whether the independents could have developed the passenger system at the time. Large operators were able to buy large aircraft, making passenger service feasible. Passenger revenues offset the need for subsidy and lowered mail rates. The pressures of the World War II probably would have led to large aircraft and the same commercial economies after the hostilities.

^{2/} Testimony before Sen. Black's investigation committee, reported in the Kennedy Hearings Report, p. 202.

It is possible, however, that the Watres Act and Brown encouraged technological innovation and the air transportation industry to develop much earlier than otherwise.

B. Entry Under the Civil Aeronautics Act of 1938

In the debates prior to the enactment of the 1938 Act, two major conflicting themes emerged: 1) the existing airlines were in financial trouble and needed protection from independent cut-rate "chiseler" operators and from themselves (a dramatic rate war did break out in the fall of 1937); and, 2) future entry by new firms and small businessmen should not be foreclosed. Although the recent Kennedy report makes much of the last position, it was probably not a significant factor at the time. The vast bulk of the testimony and floor debates concerned the protectionism aspect and not competition. In either case, industry stabilization was the first goal of all concerned.

As stated in the recent CAB Staff Study on Regulatory Reform,

...the great importance attached to protective certification, and to the maintenance of the financial health of the carriers to enable them to attract capital, implies that competitive objectives should not be allowed to override the major objective of carrier protection. (p.40)

The second goal, although not clearly stated, was the reduction and ultimate elimination of federal subsidy.

1. New Entrants. Nineteen carriers received grandfather certificates under the Act--all but four had been mail carriers. Almost all routes were monopolies and applications were for new services, not for competitive authority. As long as all airlines were sub-

sidized, it made no sense to seek or grant competitive routes. That the concern over subsidy was high in the CAB's order of importance can be seen in its first report. There were 49 applicants for new authority from existing and new firms that would have added almost 18,000 miles to the 30,000 miles originally certified.

These applications for authority to engage in air transportation over new routes..., involving a form of transportation which will derive assurance of economic survival through the payment of air mail compensation, raise new problems in connection with the concept of the "public convenience and necessity." (pp.13-14; emphasis added)

This concern over the cost of new services, either direct or indirect through the impact of competition on existing carriers was restated in the second annual report where the criteria for route awards were described:

- (a) whether the new service would serve a useful public purpose;
- (b) whether this purpose can and will be served adequately by existing lines or carriers;
- (c) whether it can be served by the applicant without impairing the operations of existing carriers contrary to the public interest; and
- (d) whether the cost of the proposed services to the Government will be justified by the benefit which would accrue to the public from the new service. (p.5)

These factors led the Board to state in the 1941 Delta Certificate Case:

The number of air carriers now operating appears sufficient to ensure against monopoly in respect to the average new route case, and we believe that the present domestic air transportation system can by proper supervision be integrated and expanded in a manner that will in general afford the competition necessary for the development of that system in the manner contemplated by the act. In the absence of particular circumstances presenting an affirmative reason for a new carrier

there appears to be no inherent desirability of increasing the present number of carriers merely for the purpose of numerically enlarging the industry. (p.480; emphasis added)

Congress responded to this position by passing the "George Resolution" in 1942 which asked, among other things, "the steps the Board contemplates taking with respect to the issuance...of certificates to air carriers who were not engaged in air transportation on the date of enactment of such Act."

In his response, Board Chairman Pogue said,

Where the evidence...shows that services applied for by companies not engaged in air transportation on the date of enactment of the act are required by the public convenience and necessity and that services by such new carriers rather than by some other applicant would best serve the public interest, the routes will be awarded to the new carrier.

It is only required that there be no uneconomical, mushroom-like growth and that there be no wasteful competition, factors which are inconsistent with the requisite showing of public convenience and necessity. (Quoted in the Kennedy Report, p.218.)

However, it was almost impossible for a new carrier to show that it, rather than an existing carrier, could better serve the public interest because the existing carrier could offer through-plane or on-hire connecting service to all the other cities it served. This factor of "beyond-area benefits" is still important in carrier selection. As the 1974 CAB Staff Study on The Domestic Route System stated:

The ability to flow traffic from the system via the city pair at issue also frequently determines the level of service in the market at issue. Hence, the carrier with the most beyond-area benefits usually can realistically propose the highest level of service in the market at issue and make the claim that it should be selected because of the "service benefits" both in the market at issue and as to beyond markets. (p.52)

Thus even before the route moratorium imposed due to the emerging conditions of the Second World War, the entry of new firms was all but precluded. With the exception of TransCaribbean and several minor carriers certificated as subsidy-ineligible, there has been no new entry on an equal footing with the grandfather carriers. This is not because of a lack of applicants. 79 applications for domestic truckline certificates were rejected between 1950 and 1974 (Kennedy Report, p.217).

Although there were several investigations of this policy by Congressional committees in the mid50's, it has never been seriously challenged until recently, even though the pressures for expansion of the aviation system into new cities and to reduce subsidies for the trunks have long since passed.

2. New Classes of Carriers.

Even though no new "trunk" carriers have been certificated, new firms have entered the certificated airline business since 1938. On several occasions, the CAB (and Congress) has created new classes of carriers to fulfill specific needs. The CAB has chosen this option in lieu of full certification because of subsidy considerations. A strong legal argument can be made that any airline fully certificated under the 1938 Act is automatically entitled to subsidy in hard times. (The CAB has requested legislation several times to clarify this position and to cut off subsidy eligibility of trunk carriers. The latest request was in 1972.)

3. Local Service

The first pressures on the CAB to create a new class of carrier was in 1943 when 348 applicants had accumulated for service to 3,631 new cities which would have added 511,170 new miles to the system.

If all pending proposals were granted, our domestic air transportation system, measured by the number of points and nubs, would be expanded to ten times its present size. (Annual Report, 1943; p.10).

The Board was torn between its duties to encourage and expand civil aviation, and to keep the subsidy program within reason. The Board "recognized that the air traffic potential of small cities is not encouraging", but felt it was incumbent upon it "to authorize so-called local and feeder services under certain safeguards for the overall economy of our air transportation system and for the financial liability of the Government in the form of mail compensation". (Annual Report, 1944, p.20; emphasis added)

To accomplish this, the Board issued "limited" certificates to new "local service" carriers. These certificates were to expire in three years unless renewed, thereby limiting subsidy. The first was issued to Essair in November, 1943.

Also, many feel the Board took this step to protect the trunks from themselves. Increased profits during the war years made the potential of trunk self-sufficiency at least possible and the Board did not wish to jeopardize their position by allowing them to expand into risky markets.

We must not lose sight of the fact that Congress in enacting the Civil Aeronautics Act of 1938 laid down with great care the guides to the objective of an economically and technically sound air transportation system. This Act contemplated, and actually resulted in, the payment of substantial sums of money out of the Federal Treasury to encourage the attainment of these objectives. These payments represent, in effect, an investment by the Government, for the common welfare, in our

present air transportation system. Needless to say we have an obligation to avoid the adoption of any ill-considered policy with respect to a general expansion of air services that would endanger the results thus far achieved under the enlightened national policy established by that Act. (Investigation of Local, Feeder and Pick-Up Service, 6 CAB 1,3 (1944); emphasis added).

By the end of 1949, 20 local service carriers had been authorized. Several never started service and at least one certificate was not renewed because of excessive subsidy cost. In 1955, Congress, over the objections of the CAB, passed a law giving certificates to the remaining 13 carriers. The CAB felt the experimental nature of the service had not yet been proven but, under the Congressional direction, started a program of expanding and supporting the local service carriers. Over the next 8 years, a number of area-wide proceedings were conducted to determine what cities should receive air service and hundreds of points were added to the local carrier routes.

In the process, marginal points served by trunks without subsidy were transferred to the locals with federal subsidy. This eliminated many of the points the trunks had supported through internal cross subsidy.

During the 1960s, locals were allowed to purchase jets and were given entry into major markets, often in competition with the trunks. The purpose was to award profitable routes that would reduce subsidy requirements. In many markets the locals have been effective, aggressive competitors although overall they still carry only about 10% of the total passenger traffic.

In 1974, Allegheny Airlines went off subsidy and essentially obtained full trunk status (although it was forced to reapply for subsidy due to

the unexpected fuel cost measures). Today's local service carriers are the equivalent of the smaller trunks 10 to 15 years ago.

Supplemental Carriers. One of the CAB's first acts in 1938 was to exempt small, nonscheduled operators from economic regulation. There were between 1,000 and 2,000 of the irregular carriers at the time, mostly fixed base operators who offered air-taxi on demand.

Following the War, however, the large number of trained pilots and surplus aircraft allowed the emergence of another type of nonscheduled operator--one capable of flying large aircraft over long distances. In its 1945 report, the CAB stated:

The need for reexamination of the services of nonscheduled operators has been emphasized in the course of the year by complaints which have been filed that certain operators have developed so-called non-scheduled services into regularly operating services in competition with carriers operating under certificates of public convenience and necessity. (pp.16 - 17).

In 1946, there were 55 large carriers; only one existed before 1945, 11 began in 1945 and 43 started during 1946. The CAB split nonscheduled carriers into two groups--large and small--in that year. by 1947, there were 94 operators of large aircraft and in 1948, 147 letters of registration had been issued, with 109 still in effect.

The Board was not unsympathetic to these new carriers and apparently considered certification to some extent. It stated in its 1948 report that:

The changes and general level of services which these carriers offer are substantially below those usually furnished by the certificated trunk-line carriers, and the service is frequently referred to as "coach-type" service.

If a substantial volume of "coach" traffic could be economically developed, it would mean the addition of a substantial volume of equipment and trained personnel

to the civil air transport system which would provide an important backlog for national defense purposes. The Board will attempt to determine whether the development of "coach-type" service is required by the public convenience and necessity. (p.6; emphasis added.)

However, over expansion and the introduction of new large aircraft had made the trunks especially vulnerable to the financial downturn in the economy (a recurring problem, it seems) in 1947-1948. This, the subsequent impact on subsidy need, and the flagrant violation of CAB regulations by some of the large nonscheduled carriers seems to have dampened the CAB's feelings toward these carriers. A letter of registration was required in 1947. In 1948, the Board announced a policy of not issuing any more letters of registration, closing the class of large, irregular carriers. In 1949, specific requests for individual exemption from the Act were required. The class began to shrink as only 97 of 105 eligible carriers requested the exemption. In 1950, the CAB denied the applications of all carriers that had conducted regular route services. The 1949 Annual Report devotes 5 typeset pages to enforcement proceedings, mainly against the nonscheduled carriers.

Meanwhile, the CAB had directly and indirectly encouraged the certificated carriers to offer coach service. This portion of the traffic grew steadily from 1948 on and CAB policy swung further toward trunk-line provision of coach service rather than the use of the irregular carriers who had pioneered it. In the 1951 decision in the Transcontinental Coach-Type Service Case, the CAB denied the applications of 4 irregular carriers to provide specialized low-fare service because unlimited air-coach service in the coast to coast markets "would result in

unnecessary, excessive, and destructive competition," and dilute the returns of the certificated carriers, impairing their ability to extend coach service to other markets.

The real question concerns the air pattern which is to serve the new market. To the extent to which it is not presently being tapped by the existing carriers this new market represents potential revenues which, in direct proportion to the penetration of that market, will be available for the further expansion of the benefits of low-fare service to the lean routes and poorer traffic cities. If the potential revenues are to be diluted by the participation of too many carriers, attainment of this goal would inevitably be thwarted. (p. 724).

Although this might have ended the large irregular carriers, the CAB was probed by the Senate Small Business Committee, which found,

...that the CAB in its reactions to the "nonsked" problem, and in its failure to appreciate the benefits the irregular carriers conferred to air transport, was overly responsive to the interests of the certificated industry. In this connection the committee stated: "There appear reasonable grounds for concluding that there exists a certain identity of interest between the CAB and the more firmly established portion of the industry. Such identity of interest is not infrequent between Government regulatory bodies and those subject to their regulation." (Kennedy Report, p. 239.)

Under pressure from this Committee, the CAB had opened a general investigation of large irregular carrier operations even before the above report was written. It reopened and consolidated applications of the 17 irregular transport carriers which had sought individual exemptions and 157 applications from 55 carriers for certificates of public convenience and necessity and exemption for limited or controlled service supplemental to the trunks and local service carriers. After almost four years of proceedings, the Board found in 1955, that,

First, irregular carriers provided useful and necessary services the certificated industry was unable or did not care to provide in the fields of charter operations, special services, and individually ticketed travel. Second, the value of supplemental carriers for service to the Military Establishment was considered so important that commercial activities, in addition to military business, was authorized to assure continued existence of their fleet. Third, in addition to helping meet the public's immediate travel requirements, the irregular carriers were found to play "a significant role as innovators in air transportation." (Kennedy Report, p. 240.)

As a result, the Board issued a new type of limited certificate permitting plane load charters and limited individually ticketed operations not to exceed 10 flights in the same direction between any single pair of points per month. This later permission was intended to allow some scheduled service which would provide a sound base to support the carrier. Of 54 applicants, 23 were granted certificates.

However, in 1960 the Court of Appeals in Washington, D.C. found the issuance of the limited certificates to be beyond the Board's legal authority.

To prevent total collapse of the industry, Congress amended the Act to permit permanent certificates for supplemental charter services. The 10 flight permission was removed by Congress to protect the turnks from traffic diversion, effectively killing off major entry to the air transport industry by supplemental carriers. By the time all proceedings were completed in 1967, only 13 supplementals were still in business and many of these have subsequently terminated operations.

All-Cargo Carriers. In 1949 and 1950, four all-cargo carriers were granted permanent certificates by the CAB. They were originally large irregular carriers but, because they were not involved in competitive passenger coach service, they avoided the conflicts described in the last

section. In general, the trunks were not interested in cargo service and did not strongly protest this new class of carrier. The Board was responding to a perceived need unsatisfied by the certificated carriers.

In its decision to introduce a new type of air transportation, furnished by airlines not previously in the certificated category, the Board pointed out that such carriers will bend all their efforts, abilities and skill to the development of air freight, as their economic welfare will depend wholly on that type of traffic... [T]he Board believes that the cargo carriers, which must introduce new methods, equipment, and managerial improvements in their businesses, will provide a valuable yardstick for measuring the alertness, efficiency, and costs of other carriers of cargo. (Annual Report, 1949, pp.10 - 11).

Commuter Carriers. A final class of carriers authorized by the CAB are the Commuter Carriers. These are a subset of the air taxi industry, which grew out of the small irregular carriers originally exempted by the CAB in 1938. A Commuter is an air taxi that performs five or more regularly scheduled round trips per week between the same two points or carries the mail. They are exempt from most CAB regulations provided they operate aircraft of less than 30 seats and 7,500 pounds payload.

There are currently about 150 commuters carrying passengers and their success under a free entry and exit policy is often given as an example of the benefits of deregulation (although many of the commuters have sought some sort of certification or route protection).

Recently, the CAB certificated Air New England, a former commuter, as a subsidy eligible local service carrier. Because of a 1974 Court of Appeals decision limiting subsidy to certificated carriers, several other commuters have applications for certificates pending at this time.

4. Analysis

According to Bernstein and others who have studied the regulatory agencies, they go through several stages of growth. Their most productive period is the early years after their founding, when they are filled with the sense of mission and goals that accompanied their founding by Congress. As the years go on, personnel change and the urgency of the problems recedes. Gradually, the agency loses its zeal and is eventually "captured" by the industry it regulates.

The CAB's policy toward entry reflects this natural pattern of birth, growth and decay. Unfortunately, during its early years when the agency was most attuned to permitting new firms into the industry, economic conditions did not favor entry. In the days of subsidy, it would not make sense to let a new carrier compete on an established route. The result would only weaken both and increase the subsidy bill. For new routes, an existing carrier could offer a better pattern of service for about the same subsidy dollar.

During the immediate postwar period when the availability of surplus aircraft and trained crews made entry technologically feasible, the established, subsidized trunks were faced with over-capacity and recession and once more the CAB's reaction was protective. Although not enumerated in the Act, "to minimize subsidy" has clearly been one of the CAB's major goals.

That the CAB was not hostile to entry per se can be seen from its creation of new classes of carriers. Because full trunk status may carry with it a legal obligation to subsidize, the CAB has been justifiably cautious in permitting trunks to try new experimental services. Small

Small city service, which might have jeopardized the trunks' movement toward subsidy-free status, was awarded to the new local service carriers. If they failed, they would not undo the progress of the system from 1938 to the 1940's.

Once the trunks were moving off subsidy and traffic and the economy were looking up in the mid50's, the CAB took a more favorable position toward the large, irregular carriers. The Board attempted to give them limited scheduled authority to provide a base for their charter operations. In this case, it was the courts and ultimately Congress which limited this type of carrier to charter-only service.

By the late 1950's and 1960's, when the trunk carriers were almost self-sufficient and competition from new carriers could have been justified on economic grounds, the Board had become somewhat "captured" and awarded new authority to the existing carriers to "balance the systems", "strengthen weak carriers", etc. Although they developed rather clear criteria as to when more than one carrier would be granted authority in a particular route, the process by which a particular carrier is selected to provide the competitive service remains shrouded in mystery.

As the carriers fell on hard times in the 1970's, the traditional protectionist attitude of the Board reemerged and even expanded competition between existing carriers was stopped through the "route moratorium". Now that conditions are once more improving and the political pressures of "deregulation" are being applied, the CAB has announced a more expansive entry policy. Whether it is effectively implemented or not is yet to be seen.

In short, the CAB's conservative entry policy was first a result of

economic realities, then of pressures from the courts and Congress and finally from concern over industry financial health. It can only be seriously criticized for the last period of entry restriction, and even that may have been justified by a fear of return to massive subsidy. Throughout its history, the CAB has permitted entry by authorizing new types of service and carriers to meet special needs. Thus, it has never been fully under the control of the trunk carriers.

The true test of the CAB's policy and degree of industry "capture" is where it goes from here.

APPENDIX C

ENTRY, MERGER, & RATE
REGULATION IN
INLAND WATER, SHIPPING &
PIPELINE TRANSPORTATION

Legal Basis & Policy Issues

George Baker
Ernst G. Frankel, Supervisor

LEGAL ISSUES

- I. INTRODUCTION
 - 1.1 History
 - 1.2 Extent of Federal Regulation
- II. ICC REGULATION OF DOMESTIC CARRIERS BY WATER
 - 2.1 Scope of the ICC's Jurisdiction
 - 2.1.1 Geographic
 - 2.1.2 Common vs Contract Carriers
 - 2.1.3 Exempt Operations
 - 2.2 Regulation of Entry
 - 2.2.1 Common Carrier
 - 2.2.2 Contract Carrier
 - 2.2.3 Dual Authority
 - 2.2.4 Temporary Operations
 - 2.2.5 Dormant Authorities & Revocation
 - 2.3 Transfer of Authority & Merger
 - 2.3.1 Transfer to Non-carrier
 - 2.3.2 Intramodal Merger
 - 2.3.3 Intermodal Merger
 - 2.4 Rate Regulation
 - 2.4.1 In General
 - 2.4.2 Intermodal Routes & Rates
 - 2.5 Cabotage Laws
- III. SHIPPING
- IV. OIL PIPELINE
- V. NATURAL GAS
- VI. NOTES ON RECENT LEGISLATION & LEGISLATIVE PROPOSALS

ICC REGULATION OF DOMESTIC WATER CARRIERS

INTRODUCTION

1.1 History

Regulation of carriers by water proceeded piecemeal until 1940. The original Interstate Commerce Act¹ applied

"to any common carrier or carriers engaged in the transportation of passengers or property wholly by railroad, or partly by water, when both are used, under a common control, management or arrangement, for a continuous carriage of shipment"

More than mere practical continuity in transportation was required², and if the common arrangement were demonstrated, only the traffic transported by water under the common arrangement was regulated.³

The Hepburn Act⁴ gave the ICC the power to prescribe through routes utilizing different railroads or railroads and water carriers. In 1912, the Panama Canal Act⁵ added a new power to prescribe through routes, the power to require physical connection between railroads and water carriers, an absolute prohibition against railroads owning carriers operating through the Panama Canal, and a prohibition against railroads controlling any water carrier unless the ICC approved of such control.

Maximum rate filing for common carriers by water in interstate or foreign commerce on the high seas or the Great Lakes was introduced in the Shipping Act of 1916⁶. The agency receiving rate filings was the predecessor of the Federal Maritime Commission (FMC).

The Transportation Act of 1920⁷ included a declaration of support for water transportation⁸ which led to the development of a "demonstration" barge line operated by the Government⁹. In 1928, Congress provided that common carriers by water should obtain a certificate of public convenience and necessity before engaging in operations on the Mississippi or its tributaries. Once a carrier was certified, the ICC would require other carriers to connect with it¹⁰.

Beginning in 1933¹¹, common and contract carriers by water operating through the Panama Canal between U.S. points were required to file actual rates with the FMC; this was extended to coastwise and Great Lakes carriers in 1938 with the FMC obtaining the power to set maximum or minimum rates¹².

The First Annual Report of the ICC recommended regulating water carriers in order to require them to publish and adhere to fixed rates because the railroads could not tell what rates they had to compete with¹³. Congress waited more than fifty years to pass legislation subjecting domestic water carriers generally to regulation.

In 1940, part III was added to the Interstate Commerce Act to regulate all interstate carriers by water (comprising common carriers and contract carriers) except those regulated as railroads because controlled by railroads.¹⁴ Prior laws regulating interstate commerce by water carriers were repealed only if inconsistent with part III¹⁵. The ICC now regulates the entry of carriers into the business, areas of operation, mergers, rates, and through routes among other things.

One commentator has commented on the addition of part III as follows¹⁶:

The circumstances surrounding the enactment of the statute were similar to those leading up to the Motor Carrier Act of 1935; the debate centered about the question of how far water carriers should be regulated in order to protect railroads from unregulated competition.

A District Court declared that the purposes of regulating transportation by water were to preserve the earning capacity of the carrier and to prevent ruinous competition¹⁷, borrowing words the Supreme Court had used in explaining the purposes of regulation under earlier portions of the Interstate Commerce Act.

Also added in 1940 was a statement of national transportation policy which is to guide the ICC in all its decisions. The policy is, in part¹⁸, "...to provide for fair and impartial regulation of all modes of transportation subject to the provisions of this Act, so administered as to recognize and preserve the inherent advantages of each ..." This policy prompted the Supreme Court to find that the purpose of the 1940 Act, together with the old law, was, "...to provide a completely integrated interstate regulatory system over motor, railroad, and water carriers."¹⁹

1.2 Extent of Federal Regulation

Significant exemptions from part III which will be discussed in detail later, limit the extent of federal regulation. Some figures from the 83rd Annual Report of the ICC for 1969 demonstrate this as well as suggesting the importance of water transportation in the transportation system.

In 1967, 13% of the intercity ton-miles carried over water were federally regulated compared with 36% carried by motor, 86% carried by pipeline, and 100% for ton-miles carried by rail and air. Only railroads carried more ton-miles, and while the regulated water ton-miles were less than half the regulated motor ton-miles, the unregulated water ton-miles alone were more than all the motor ton-miles. The ton-miles by water included coastal, inland waterways, interccastal, and Great Lakes traffic.²⁰ On the inland waterways, and Great Lakes taken separately, it has been estimated that up to 95% of the ton-miles carried are exempt from federal regulation.²¹

With such significant exemptions, the ICC is not kept busy by water carrier regulation: in fiscal 1969 the ICC closed 7,810 cases of which 26 involved water carriers. Out of 256,000 common carrier tariffs received only 4,000 were received from water carriers and 726 from pipeline companies; of 20,000 tariffs criticized, 165 were from water carriers and 55 from pipeline companies; and of 3,200 tariffs rejected, only eight were from water carriers, and nine were from pipeline companies.²²

As of June 30, 1969, 92 water carriers and 96 oil pipelines were required to file annual and periodic reports and to follow the uniform system of accounts. However, there were an additional 103 water carriers with less than \$100,000 in gross revenues required to file annual reports but not subject to the uniform system of accounts.²³ The latter figure suggests an industry full of small operations. Revenues of water carriers

having revenues over \$100,000 constituted a mere 1.4% of the operating revenues of all surface carriers for 1968; their share of investment in operating property and equipment was only .8%. Pipelines accounted for 4.4% of the revenue but 9.8% of the investment.²⁴

II ICC REGULATION OF DOMESTIC CARRIERS BY WATER

2.1 Scope of the ICC's Jurisdiction

2.1.1 Geographic Description

Domestic water carriers operate between points in the United States in five general geographic areas of service: along the inland waterways, along either the Gulf or Atlantic intra-coastal waterway, between ports along one coast (coastwise trade), on the Great Lakes, and on intercoastal routes via the Panama Canal²⁵. This classification is introduced mainly for clarity in discussing different types of service, but where the type of operation has an effect on the regulations imposed, the effect will be noted.

The Interstate Commerce Commission (ICC) regulates interstate transportation of goods by water which indicates a movement from a point in one state to a point in another state (except between Alaska or Hawaii and the mainland).²⁶ Interstate transportation includes transportation on a route which merely passes through the waters of another state²⁷, on a route from one state to another state via a foreign port²⁸, or on a through route from state to state even though the water portion is entirely within one state.²⁹ However, the ICC has no authority to regulate intrastate rates even if they discriminate against interstate commerce.³⁰ The ICC also regulates movement within the United States of goods in foreign commerce either prior to transshipment for a foreign port, or subsequent to such transshipment at the U. S. port after movement from a foreign port.³¹ The FMC regulates the transportation of goods between foreign ports and the United States.³²

Since ICC jurisdiction over goods in foreign commerce requires a finding of transshipment, the use of lighter-aboard-ship (LASH) barges within the U. S. posed a regulatory problem. LASH barges are carried fully loaded aboard a "mother-ship" from a foreign port to the United States, then lowered into the water to be towed to inland destinations.³³ The ICC claimed jurisdiction over the towing of LASH barges³⁴ on the grounds that the effect of lowering the barges into the water was the same as transshipment by transfer of lading. In upholding the ICC's determination, the district court³⁵ observed that technological advances should not defeat the ICC's jurisdiction.

2.1.2 Common vs Contract Carriers

Regulated water carriers fall into two classes: common carriers and contract carriers. Section 310³⁶ generally precludes a given carrier from being both a common and a contract carrier. As previously noted, however, the greater portion of transportation by water is exempt from regulation.

A common carrier by water is defined as "any person which holds itself out to the general public to engage in the transportation by water in interstate or foreign commerce of passengers or property ... for compensation ..."³⁷ The critical factor is that the carrier must be willing to engage in transportation for anyone to be judged a common carrier. A regulated common carrier is issued a certificate of public convenience and necessity (hereinafter, certificate), as described below, and is thereafter required to provide transportation "upon reasonable request therefor".³⁸

The contract carrier, on the other hand, does not make his services generally available to the public. He engages in transportation for compensation (other than as a common carrier) of passengers or property in interstate or foreign commerce under individual contracts or agreements.³⁹ "Transportation" includes furnishing a vessel for compensation to a person not a carrier regulated by the Act, unless the ICC determines that regulation of such person is not necessary to effectuate the national transportation policy resulting in his receiving an exemption. The exemption may later be revoked by the ICC, if necessary.⁴⁰ Vessel furnishing is considered to be different from other contract carrier operations; authority to furnish vessels to non-carriers does not include authority to engage in other contract carrier operations.⁴¹ The authority to engage in contract carrier operations is embodied in a permit containing a description of the authorized operations together with any restrictions. Obtaining permits is discussed later.

Contract carriers of cargo serve only a small number of shippers (rather than the general public) under individual contracts (rather than fixed tariffs) on an irregular or as-needed basis (rather than on a schedule). They frequently deal only in full-cargo shipments for one shipper per voyage or else large shipments for a very few shippers. Since the distinctions between common carriers and contract carriers are not precise, restrictions may be placed on the contract carrier's permit to preclude it from competing with the common carriers,⁴² or the authority may be denied altogether if the existing carriers can provide the needed service.⁴³

2.1.3 Exempt Operations

It has been previously noted that much of the domestic transportation by water is exempt from regulation. Some exemptions are absolute while others are within the discretion of the ICC.

Absolute Exemptions

Two absolute exemptions exist which are available to any carrier and a third is available only to contract carriers passing through international waters. For convenience, the exceptions will be numbered and a descriptive phrase given for each.

1. Bulk Commodities. Section 303(b)⁴⁴ provides that the transportation of certain commodities which were carried without wrappers or containers in 1939⁴⁵ is exempt from regulation unless the route followed passes through the Panama Canal. The exemption is not lost if other commodities are carried at the same time, though the other commodities are still regulated. "Bulk commodities are usually fungible goods such as grains, coal or ore. Any water carrier can engage in the transportation of bulk commodities throughout the entire inland waterways without requesting any grant of authority from the ICC."⁴⁶ Additional bulk commodities are alumina⁴⁷ and phosphate rock.⁴⁸

2. Liquid Cargoes. Section 303(d)⁴⁹ exempts transportation by water of liquid cargoes in tank vessels designed and used exclusively for such service and approved by the Coast Guard.

3. Great Lakes Bulk Commodities. Section 303(c)⁵⁰ exempts transportation by water of not more than three commodities in bulk (not restricted as in 303(b)) on a

non-oceangoing vessel through waters made international by treaty. This provision applies to the Great Lakes.⁵¹

Discretionary Exemptions

Four additional exemptions are discretionary with the ICC.

4. Section 303(g)(1)⁵² permits the ICC to exempt transportation within a harbor which is not part of a continuous through movement in interstate commerce.

5. Section 303(h)⁵³ permits the ICC to exempt a carrier which transports only property of the person controlling the carrier. (Such a carrier is also known as a private carrier.)

6. "Non-Competitive Contract Carriage". Section 303(e)⁵⁴ permits the ICC (in accordance with the declared policy of congress) to exempt transportation by contract carriers⁵⁵ by water which is not actually and substantially competitive with transportation by any common carrier because of the inherent nature of the commodities transported - their requirement for special equipment or transportation in bulk. In granting this exemption, the ICC need not consider its effect on the national transportation policy.⁵⁶ This exemption may be revoked by the ICC, but the ICC must authorize the previously exempt transportation without further proceeding if such authority is sought.⁵⁷

By order,⁵⁸ the ICC has exempted all transportation of oil field equipment in Gulf states marshlands. A district court has approved the exemption of "transportation by water of contractor's equipment, materials and supplies incidental to and used with such equipment in construction work on the Mississippi River and its tributaries..."⁵⁹

In another case, the carrier proposed to carry regulated cargoes on the decks of vessels carrying petroleum products in tanks, which meant losing the Section 303(d) exemption. However, the transportation of the petroleum products was exempted under § 303(e)(2) (as being not substantially competitive with transportation by any common carrier by rail or motor) because transportation by water was so cheap that the other common carriers were, as a practical matter, excluded from that trade.⁶⁰

The ICC elaborated somewhat on the criteria for exemption in Bulk Food Carriers, Inc., - Exemption Application.⁶¹ An exemption was granted for the bulk transportation of phosphate rock from Florida to Calif.⁶² even though the inherent nature of the commodity, that is a requirement for special equipment or shipment in bulk, did not demonstrate that shipment by the protesting railroads was infeasible. But from evidence of the unwillingness of the railroads to provide this service,⁶³ the ICC inferred that transportation by rail was impractical or unattractive for some reason and that therefore, the proposed service by water would not be actually or substantially competitive.⁶⁴

7. Vessel Furnishers. Section 302(e)⁶⁵ permits the ICC to exempt from regulation the furnishing of a vessel when regulation thereof would not be necessary to effectuate the national transportation policy. The purpose of regulating vessel furnishers is to prevent shippers from using the pool of vessels available from the furnishers to enforce unreasonable demands on the common and contract carriers,⁶⁶ or to prevent the vessel furnishers from offering rates low enough to

attract shippers away from the regulated carriers.⁶⁷ Since vessel furnishing should be exempted only when the person obtaining the vessel could not use it in substitution for (or competition with) common or contract carriers, the criteria for exempting vessel furnishers should be quite similar to the criteria for exempting contract carriers under §303(e)(2)⁶⁸, except that under §302(e), the effect on the national transportation policy must be assessed. Either a permit or an exemption must be obtained⁶⁹; willful failure to obtain a permit subjects a person to criminal sanctions under §317(a).⁷⁰

2.2 Regulation of Entry

2.2.1 Common Carrier

A person desiring to be a common carrier in interstate commerce must apply for a certificate of public convenience and necessity. He bears the burden of convincing the ICC that he is able to perform the proposed service and that the service is or will be required by the present or future public convenience and necessity.⁷¹ A competitor is entitled to intervene in these proceedings to oppose the grant of authority by disputing the showing necessary to entitle the applicant to a certificate.⁷² The granting of a certificate was found⁷³ not to be subject to the National Environmental Policy Act of 1969.⁷⁴

Rarely will an applicant be found unqualified simply for lack of financial resources.⁷⁵ Even if an applicant holds authorities under which operations are not being conducted (dormant authorities), this does not preclude a finding by the ICC that an applicant is willing and able to conduct the proposed service.⁷⁶

Litigation usually erupts over the contents of the term "public convenience and necessity". Probably the most quoted enumeration of factors considered in making findings of public convenience of necessity appears in Nashua Motor Express, Inc. vs United States:⁷⁷

[I]nadequacy of present service is not a term which is convertible with that of public convenience and necessity, but is, rather, only one element to be considered in arriving at the broader determination of public convenience and necessity Other elements of importance appear to be the desirability of competition, the desirability of different kinds of service, and the desirability of improved service.

These factors will be elaborated in the order given in order to give some idea of what are pivotal considerations in particular cases.

The applicant may attempt to demonstrate that the present service is inadequate⁷⁸ or non-existent.⁷⁹ The ICC may be very liberal in granting authority to operate on newly completed waterways on the grounds that it can remove any surplus of authorities by revoking dormant authorities.⁸⁰

If there is no showing that the present service is inadequate, this does not imply that the application for a new service must be denied.⁸¹ This is true whether or not the proposed service constitutes an improvement over existing service.⁸² In fact, a certificate need not be denied merely because there is adequate existing rail and motor service.⁸³

It is frequently stated that adequate present service cannot preclude award of a certificate for that would read "convenience" out of the statute.⁸⁴ The ICC may consider future shipping needs⁸⁵ and grant applications without finding that existing carriers would be unable to expand to meet future demand. The ICC has broad discretion to determine the public interest on looking at the total situation; they may decide that future shipping needs should be assured, not left uncertain.⁸⁶ It may also be that the ICC will consider the argument that providing quality service by water will lead to the development and location of industry along the waterway, thus ensuring the future demand necessary to justify the present grant of authority.⁸⁷

Of course in a given situation, the applicant may be unable to prove the need for his service,⁸⁸ or the protesting carriers may claim that apparent inadequacy of present service is due to operating conditions which could not be affected by authorizing another carrier to operate in the area.⁸⁹

The ICC determines how much competition is in the public interest, not the courts.⁹⁰ A certificated water carrier may not complain about competition which arises through granting a certificate to an applicant; the certificate grants no exclusive right to use the waterway⁹¹ nor immunity against competition.⁹² A certificate may be granted if it is in the public interest to do so, even if existing carriers will have to share the tonnage with the applicant.⁹³ On the other hand, "[E]xisting carriers are entitled to transport all of the traffic they can handle adequately, efficiently, economically without the competition of a new service in the considered territory".⁹⁴ (This may only be another way of saying that in the quoted case, the applicant failed to show a need for the service.) Increasing competition may be one factor in favor of granting a certificate.⁹⁵ Allegations of antitrust violations are disposed of in ruling on the basic issues of the applicant's fitness to conduct the service and the public need for it.⁹⁶

A certificate may be approved in part because the applicant proposes a different kind of service.⁹⁷ The proposed service may be different simply because it is provided by a water carrier; in such a case, shippers may be found to be entitled to the "inherent advantages"

of transportation by water,⁹⁸ even where other transportation is available, if a need for transportation by water is shown.⁹⁹ The major advantage of transportation by water is low transportation charges.¹⁰⁰ If this were the only reason for granting a certificate, it might be necessary to actually inquire into comparative rates.¹⁰¹ Where there are other reasons for the grant of authority, such an inquiry is not necessary.¹⁰²

If a carrier proposes a more efficient¹⁰³ service or some other improvement in service,¹⁰⁴ this may be a factor favoring award of a certificate. The decision whether a proposed service is economically sound is for management in the first instance; an application need not be denied merely because the service is of unproven economic soundness where a need for the service has been shown.¹⁰⁵

Where a certificate is sought, it will not be denied because the operations resemble the operations of a contract carrier, because the applicant will have to hold himself out to perform transportation for the general public, not just the shipper he currently has in mind.¹⁰⁶

The certificate which is granted specifies the areas to be served and the conditions of operation. The ICC may impose conditions or limitations on the carrier's operations, but may not restrict the carrier in adding equipment or in extending its operations to include uncompleted portions of waterways if it is authorized to operate on the completed portions.¹⁰⁷

The type of service permitted is also specified according to the type of equipment used. If the carrier tows its own barges, it is engaged in freight-¹⁰⁸ing and its authority will read (in part), "by non-self-propelled vessels with separate towing vessels". If, however, the carrier operates by towing only barges owned by shippers, it is engaged in general towage, a different service which must be specifically authorized in the certificate.¹⁰⁹ Certificates routinely include both authorities.

"There is no requirement in Part III that a water carrier must own or actually operate vessels. The statutory requirement is use of the vessel irrespective ownership".¹¹⁰ Thus, a person is engaged in transportation by towage if he either charters tugs to tow shippers' barges or hires space in another carrier's tow. Such a person is a carrier and such hiring of towage is not unlawful.¹¹¹

2.2.2 Contract Carriers

An applicant desiring to conduct contract carrier operations must obtain a permit to operate as a contract carrier in a certain area.¹¹² The applicant must demonstrate his entitlement to the permit by demonstrating that he is able to perform the proposed service, that the service is in the public interest, and that approval is consistent with the National Transportation Policy.¹¹³ This last showing is not required of a common carrier, although it may not be much different from a showing of need for the service.

In the case of an application by a subsidiary of U. S. Steel, which desired to transport its steel to Cape Canaveral for use in the space program, the following general summary of contract carrier applications appears.¹¹⁴

"Under the contract carrier provision of Part III, applications have generally been denied upon showing that existing carriers could provide the shipper with the type of service it requires. See Indian Towing Company, Inc. Contract Carrier Application, [309 ICC 473 (1970)]. On the other hand, contract carriers by water have been granted extensions of authority in cases of shipper owned carriers which gear their services to their parent companies in the interest of efficiency and economy. Ohio Barge Line, Inc., Extension -- Pig Tin, 285 ICC 5. Contract carrier authorities also have been granted where the showing is made that low-cost transportation would be provided by the applicant and that an applicant's equipment is especially adapted to the shippers' needs and protestant has not furnished a reasonably adequate service. Marine Transport Lines, Inc. Extension - Los Angeles, 285, ICC 655, Hanson-Towing Company Contract Carrier Application, 311 ICC 609, McGehee Contract Carrier Applications, 285, ICC 107."

The permit granted specifies the scope of the business permitted, but no condition in the permit may limit the carrier's right to substitute or change contracts, or to add to his service or equipment within the scope of the permit and as business requires.¹¹⁵

2.2.3 Dual Operations

Section 310¹¹⁶ prohibits any carrier or person controlling, controlled by, or under common control with such carrier from holding both a certificate and a permit unless the ICC finds that holding both authorizations is consistent with the public interest and the NTP. Operations as both a common carrier and a contract carrier are called dual operations.

Such operations are consistent with the public interest and the NTP when they are not competitive with each other¹¹⁷ or are conducted separately,¹¹⁸ or when the contract carrier operations are exempted under 303(e)(2).¹¹⁹ Possible conflict with §310 may be prevented through certificate restrictions.¹²⁰ Even if the reasons are not given for the grant of permission to engage in dual operations, the authorization is subject to the retained right in the ICC to reconsider the decision if a change brings about "an improper competitive situation, discrimination, or preference".¹²¹

2.2.4 Temporary Operations

If there is an immediate or urgent need for service¹²² by a common carrier or a contract carrier in a given area, the ICC may authorize such service for up to 180 days without a hearing. If such authority is

granted, there is no presumption that permanent authority will thereafter be granted.¹²³ However, the operations may continue until the ICC rules on an application for permanent authority which was submitted in a timely manner.¹²⁴

2.2.5 Dormant Authorities & Revocation

No authorization from the ICC is necessary for a carrier by water to cease operations. Of course, if a common carrier ceases operations, it violates its duty to provide transportation on reasonable request therefor, 305(a).¹²⁵ No penalty appears to attach to this violation, however. Thus, a certificate or permit may very easily become dormant. "Operations under dormant rights may be revived by the holder at any time".¹²⁶

Under the regulations, dormant rights may not be transferred unless the dormancy is for reasons beyond the carrier's control.¹²⁷ Under a 1965 statutory change¹²⁸ the ICC has acquired specific authority to cancel dormant authorities.¹²⁹

2.3 Transfer of Authority & Merger

2.3.1 Transfer to Non-Carrier

The transfer of a certificate or permit under section 312¹³⁰ to any person who is not already a carrier is largely governed by regulations¹³¹ issued to protect the public interest and insure compliance with the law and regulations. If the transaction involves two carriers, however, different standards under §5(2)¹³² apply. The primary showing necessary under the regulations is that¹³³.

[T]he proposed transferee is fit, willing, and able properly to perform the service authorized by the certificate or permit sought to be transferred and to conform to the provisions of Part III of the Interstate Commerce Act and the requirements, rules and regulations of the Commission thereunder.

The transactions under Section 312 are usually routine and include transfer from a subsidiary corporation to its parent,¹³⁴ and one terribly ill-fated transfer from an individual to a corporation he allegedly formed.¹³⁵ Failure to conform to the regulations concerning such transfer, if deemed an attempt to evade the regulations, may lead to denial of the transfer on the grounds that the proposed transferee has been shown unable to conform to the regulations of the ICC.¹³⁶

If operations have been suspended under the certificate or permit to be transferred, the transfer will be approved only on the additional showings that the suspension was beyond holder's control and that the water-carrier operations under the authority to be transferred will be consistent with the public interest.¹³⁷

2.3.2 Intramodal Merger

If a proposed transactions will result in control or common ownership of two or more carriers, the transaction must be approved by the ICC under § 5(2);¹³⁸ if it is not, the control or power to exercise control is unlawful.¹³⁹ The ICC may approve the transaction together with such conditions as it may find reasonable if it is found to be in the public interest.¹⁴⁰ Four statutory factors are to be included in the determination of whether to approve the transaction:¹⁴¹

1. the effect on adequate transportation service to the public;
2. the effect on the public interest of including or not including other area railroads;
3. the total fixed charges to result;
4. the interest of the carrier employees.

Additional factors, discussed below, must be considered if one of the carriers is a railroad.

The term "carrier" (for the purposes of §5(2)) comprises railroads, express companies, sleeping car companies, motor carriers, and water carriers subject to the Act.¹⁴² We are concerned here with mergers in which at least one carrier is a water carrier. If all the carriers involved are water carriers, the transaction is referred as "intramodal"; if at least one carrier is not a water carrier, the transaction is termed "intermodal". A water carrier may have been exempted by the ICC from regulation but it is still a carrier subject to regulation so that the acquisition of control by another carrier is subject to §5(2).¹⁴³

Certain equipment arrangements between carriers are not subject to §5(2). Purchase or operation of

carrier's equipment is not subject to ICC approval so long as the transaction does not put the other carrier out of business;¹⁴⁴ but if the effect of the transaction, whether in equipment or otherwise, is to put a competitor out of business or otherwise effect control over two or more carriers, approval under §5(2) is required.¹⁴⁵

In a merger of two large water carriers,¹⁴⁶ into Union Mechling Corp., the ICC commented on their approval criteria as follows:¹⁴⁷

Among the factors to be considered in determining the question of consistency with the public interest are (1) the needs of the shippers, (2) the ability of the carrier to provide the proposed service, (3) the effects of the proposed service on existing carriers, and (4) the economic soundness of the water carrier industry as a result of the approval of the transaction.

Thereupon, the ICC made the following findings: that Union Mechling was financially able to meet the fixed costs arising from the transaction;¹⁴⁸ that the merger would result in substantial savings;¹⁴⁹ that the merged corporation would provide more frequent sailings than either presently provided;¹⁵⁰ that it was unimportant that the transaction involved the merger of two financially healthy carriers;¹⁵¹ that there would be no substantial reduction in total transportation service in the affected region;¹⁵² and that on balance, including the competitive effect of a larger carrier, the transaction was consistent with the National Transportation Policy. The last point bears some elaboration.

Despite the large size of the resulting carrier, in an industry in which its two constituents were part

of the so-called "Big-Five",¹⁵³ little was said directly about the effect of the merger on the remaining water carriers. The ICC noted that the competitive effect would be just one factor to be weighed against advantages like improved service, safer operation, and reduced costs, to determine whether the consolidation will help effectuate the National Transportation Policy (NTP). While carte blanche to approve any merger was not granted, the ICC felt that the transportation acts and the NTP contemplated national systems of a limited number of entities in each mode, adding¹⁵⁴, "A reduction in intramodal competition and an increase in the size of those carriers which survive consolidation was contemplated." It does not appear that "bigness" is much of a bar to intramodal mergers of water carriers.

In intramodal mergers of motor carriers¹⁵⁵ and railroads,¹⁵⁶ the Supreme Court has been explicit in saying that the ICC need not deny a §5(2) application, even if it could be found to violate the antitrust laws, if the merger is in the public interest. The anticompetitive effect is one factor to weigh in determining the public interest. One justification advanced by the Court for not giving antitrust considerations controlling weight is that rates are regulated thus reducing one of the evils the antitrust laws sought to attack.¹⁵⁷

2.3.3 Intermodal Merger

If the acquisition is intermodal, the findings discussed above in the intramodal situation must be made. It appears, however, that the ICC takes much more seriously the question of the anticompetitive

effect in such a case than in an intramodel merger. If this apparent difference actually exists and is a principled distinction, it probably stems from the fear that an intermodal merger might operate to the detriment of the "inherent advantage" of the constituent modes, contrary to the National Transportation Policy.

Thus, while saying that acquisition of a motor carrier by a water carrier is not subject to antitrust complaints, the ICC was careful to consider whether the transaction would seriously disrupt competition by improving either company's finances in an anticompetitive manner, eliminating a service competitive with one mode, or by instituting a coordinated service to the detriment of competition in one mode or the other.¹⁵⁸

If either a water carrier or a motor carrier is the acquiring carrier, it need only show that acquisition is consistent with the public interest.¹⁵⁹ However, if the acquiring carrier is a railroad, the applicant must affirmatively show that the public interest will be served by approving the merger and that competition (in the mode acquired) will not be reduced.¹⁶⁰ This policy is seen to reflect long-standing congressional concern that the railroads not be permitted to dominate the other modes of transportation.¹⁶¹ With regard to transportation by water, this policy first found expression in the Panama Canal Act of 1912 one provision of which prohibited a railroad or pipeline company from controlling a water carrier utilizing the Panama Canal¹⁶² and another provision of which permitted any railroad or pipeline company to control any water carrier not utilizing the Panama Canal with which it does or may compete.

Permission would be granted if it appeared that the railroad would not prevent the water carrier from operating in the public interest and that approval would not reduce competition on the water route.¹⁶³

Shortly after the passage of the Panama Canal Act, the ICC forced eastern railroads to give up their control of boats plying the Great Lakes.¹⁶⁴ The ICC believed that the railroad-dominated lines were stifling competition, and that divestiture would revive competition. One source cites an ICC study which concluded that not only did the decision fail to revive competition, it also resulted in a substantial decline in the package freight service on the Great Lakes. This source goes on to point out that the ICC did frequently permit railroad control of water carriers; in these cases, control had the support of shippers and other interested groups.¹⁶⁵

In 1962, the ICC denied the application of the Illinois Central and Southern Railroads to jointly control John I. Hay Co., a barge line.¹⁶⁶ The ICC was not satisfied that control of Hay by the railroads would not reduce competition. Since the explanation of how competition might be reduced is not entirely consistent, the case may help illustrate a strong aversion to railroad control of water carriers. On the one hand, the ICC noted that the barge routes were substantially parallel to the railroutes and inferred from the evidence of control¹⁶⁷ that the operation would be conducted to maximize all-rail routes. It is this finding which appears to explain the decision.^{167.5} The ICC on the other hand expressed solicitude for Hay's competitors by suggesting that Hay's access to capital and the

larger sales force provided by affiliation with the railroads would potentially reduce competition by driving Hay's competitors out of business.¹⁶⁸ Of course, this apparent inconsistency is not entirely inappropriate insofar as it indicates the railroads' failure to relieve the ICC's doubts concerning the effect of the transaction on competition; the decision may indicate, however, how severe a burden this can be.

In 1972, though, the ICC authorized Southern Railway to operate a subsidiary to ship coal from new mines by barge via the Ohio and Tennessee rivers and by rail from Sheffield, Alabama to landlocked utility companies.¹⁶⁹ The ICC ruled that permission would be granted unless (1) the railroad and the controlled carrier served two or more common points and (2) the two carriers do, or would but for common ownership, compete for the same traffic. The ICC found that there were no facilities for loading railroad cars at the mine so that interline railroad service¹⁷⁰ was not available and therefore the two carriers did not serve two common points. The ICC also found that if an all-rail route were established, it would be unlikely to be competitive with the water-rail route, satisfying the second part of the test.¹⁷¹

It should not be surprising that hearings on repeal of §5(16) provoked adverse comments from the representatives of common carriers by water.¹⁷² One statement was careful to distinguish integrated transportation from common ownership of several modes of transportation.¹⁷³

In sum, operating authority may be transferred to a non-carrier merely by showing the transferee is

able to lawfully provide service. If two or more regulated carriers combine, the result must be consistent with the public interest, and anticompetitive effect is merely one factor in considering the result. Railroad control of any other mode of transportation may not be approved except on an express finding that competition in the other mode will not be reduced.

2.4 Rate Regulation

2.4.1 In General

The rates of common carriers by water are regulated much like those of other carriers subject to the Act. The common carrier must provide transportation for just and reasonable charges, all unjust and unreasonable charges being unlawful.¹⁷⁴ Discrimination against persons, ports, connecting carriers, etc. is forbidden, but lower rates than another carrier are not discrimination against such other carrier.¹⁷⁵ Rates may not be lower for a longer than for a shorter distance over the same route unless the lower rates are authorized by the ICC and are compensatory.¹⁷⁶ Tariffs showing all charges must be filed with the ICC and the carrier may not charge other than the lawful, filed rates; but the ICC may reject a tariff rendering it void and unlawful.¹⁷⁷ Complaints of unlawful rates may be heard by the ICC which may then prescribe the lawful rate, or maximum or minimum rates, or maximum and minimum rates.¹⁷⁸ Any new rate may be suspended for not more than seven months to permit investigation, but goes into effect thereafter whether or not the investigation is concluded.¹⁷⁹

In prescribing rates and regulations relating thereto,¹⁸⁰

"[T]he Commission shall give due consideration, among other factors, to the effect of rates upon the movement of traffic by the carrier or carriers for which the rates are prescribed; to the need, in the public interest of adequate and efficient water transportation service at the lowest cost consistent with the furnishing of such service, and to the need of revenues sufficient to enable water carriers, under honest, economical, and efficient management, to provide such service".

In ruling on rates, the ICC may not take into consideration any evidence of the value of the carrier's goodwill, earning power, or certificate.¹⁸¹

Contract carriers are required to establish reasonable minimum rates.¹⁸² The ICC may require that actual contracts be filed with it,¹⁸³ but it has declined to do so.¹⁸⁴ The ICC may prescribe a minimum charge if a minimum rate contravenes the NTP and may suspend a minimum rate for seven months to permit a hearing.¹⁸⁵

2.4.2 Intermodal Routes & Rates

The ICC has some statutory guidance with respect to through routes by rail and water, the division of rates over through routes, and competitive rates in different modes.

Common carriers by water must establish through routes with other water carriers and with railroads; railroads must also establish through routes with water carriers.¹⁸⁶ If there is a through route, a joint rate may be (but need not be) charged which is less than the

sum of the several local rates over the route travelled.¹⁸⁷ If the carriers do not establish through routes on their own, the ICC may order them to establish through routes and may order establishment of joint rates over those routes when considered to be in the public interest.¹⁸⁸ Carriers are also required to provide the facilities for interchange of traffic without preferring some connecting carriers over others.¹⁸⁹ Under part of the Panama Canal Act, the ICC can order the establishment of a physical connection between a railroad and a common carrier by water.¹⁹⁰

The problems that common carriers by water have had in establishing through routes with railroads and joint rates over those through routes was summed up by the Supreme Court:¹⁹¹ "This [case] ... is but another episode in the long and continued struggle between the railroads and competing barge lines".

The conflict between water carriers and railroads over joint routes takes many forms. The first problem a water carrier faces is the establishment of a through route. Of course, a railroad may not refuse to establish a through route with a water carrier, but railroads have attempted to discourage the establishment or use of through routes by other devices. The Pennsylvania Railroad interchanged cars with Seatrain for carriage to Havana and back, but refused permission for use of its cars when Seatrain announced a service between New Jersey and Louisiana via Havana. The ICC, under its power to prescribe through routes, ordered the interchange of railroad cars with Seatrain. The Supreme Court sustained the order declaring in passing that the National

Transportation Policy (NTP) required the interchange lest the inherent advantage of Seatrain's service be lost.¹⁹²

Even if there is a through route, the railroad may, by lowering the all-rail through rate, and holding up the rate for the rail portion of a barge-rail rate, attempt to make the barge-rail rate unattractive. When the ICC in such a situation dismissed the barge lines' request for establishment of a joint barge-rail rate (i.e., lower than the sum of the local rates between the points served), the Supreme Court ruled that the ICC must establish a joint rate under §307(d) whenever a joint rate (the all-rail rate) is used "to favor rail carriers over carriers by water and to deprive the latter of their 'inherent advantages'."¹⁹³

In prescribing a joint rate, the ICC must preserve the inherent advantages of each mode, including cost advantage. A differential between local and through rates may not discriminate against connecting carriers unless justified by different costs.¹⁹⁴ But barge rates lower than railroad rates on account of the inferior service by barge do not constitute unlawful discrimination against railroads, if the rates are compensatory.¹⁹⁵

Grain, shipped from Chicago to New York by rail, arrives in Chicago by rail, barge, and lake steamer. When the railroads were unable to discourage barge traffic by charging higher rates for ex-barge grain,¹⁹⁶ they sought permission (under §4)¹⁹⁷ to charge a lower rate for transporting grain to Kankakee (and then to New York) than for transporting grain to Chicago (and then New York). The purpose was to lower the all-rail rate

to New York to the level of the barge-rail rate via Chicago. The Supreme Court found that the ICC's order granting §4 relief was unsupported by the record and erroneously arrived at because the ICC failed to consider whether the rates violated other sections of the Act or the National Transportation Policy (NTP).¹⁹⁸

Historically, then, it has at times been difficult for water carriers to establish through routes with railroads and to obtain non-discriminatory joint rates with the railroads.

When two different modes of transportation are competing for the same traffic, the ICC has the problem of defining what its objectives should be in assessing the evidence supporting a rate-filing. Section 15a(3)¹⁹⁹ was added in 1958 because the railroads felt that the ICC had maintained railroad rates at an artificially high level to prevent competing modes from being driven out of business.²⁰⁰ This section provides in part:

"Rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving due consideration to the objectives of the National Transportation Policy declared in this Act."

Dissatisfied with ICC activity under §15a(3), the Congress in 1976 amended²⁰¹ the section to make it inapplicable to railroads and added new §§15a(4)²⁰² and (5)²⁰³ to apply to railroads. In addition, new §1(5)(b)²⁰⁴ redefines the reasonable rates for railroads.

Taken together, the amendments appear to wipe out a history of deciding intermodal competitive rate cases by reference to the inherent cost and service advantages

of each mode and to whether those advantages were destroyed by the proposed rates. The Senate Committee expressed its desire that the changes have this effect.²⁰⁵

As a result of the changes, the ICC is to consider the competitive effect of the rate with respect to shippers, commodities, ports, and the like and not with respect to other modes of transportation.²⁰⁶ A railroad rate which covers variable costs will not usually be considered unreasonably low. Therefore, it appears that railroads may cut their rates to compete with barge lines to levels which cover variable costs, and the barge line may not object to the effect this competition has on its business except to the extent that such rates are contrary to §§ 2, 3, or 4 of the Act. It is doubtful that the barge line may object that the effect of a reduced rate on its business is contrary to the National Transportation Policy.²⁰⁷

2.5 Cabotage Laws

Cabotage laws are laws designed to reserve to a nation's own ships the coastwise trade between a nation's ports. The chief cabotage law of the United States, known as the Jones Act,¹ provides that merchandise transported between points in the United States must be transported in vessels built in the United States, documented under the laws of the United States,² and owned by citizens of the United States;³ if not so transported, the merchandise is subject to forfeiture.

Two provisos are designed to help alleviate burdens which might be placed on shipping as a result of development of new technologies of transportation. Empty LASH and Seabee barges, containers, and equipment other than propulsion equipment for use with such barges or containers may be transported between U. S. points in non-qualified vessels. In addition, one non-qualified barge belonging to the same company or consortium as the "mother-ship" may transfer cargo to another non-qualified barge for further movement in U.S. foreign commerce as long as the country of the "mother-ship" registry permits reciprocal privileges in its waters to barges registered in the United States.⁴ In 1973, the Secretary of the Treasury reported to Congress no developments in reciprocity under the law.⁵

Other exemptions from the coastwise laws exist and are potentially lucrative although they are not of general application. An attempt to obtain an exemption for the tanker Sansinena in 1970 under the emergency legislation dating back to the Korean Conflict met with such an uproar that the exemption was withdrawn six days after it was announced.⁶

A vessel may lose its entitlement to engage in the coastwise trade if it is ever sold foreign or placed under foreign registry, or rebuilt anywhere other than the United States with major components built anywhere other than in the United States.⁷

III SHIPPING

The organization of the ocean-shipping industry has been widely studied. No nation has jurisdiction to impose comprehensive regulation on the industry because the seas are open to navigation by all. Apparently, the only important examples of a nations regulating foreign commerce between their ports and those of other nations are the United States and Australia.¹

The ocean-shipping industry is largely self-regulated through organizations of carriers in each trade route, called "conferences", which set rates and may influence the number of sailings over a given route. Since these agreements would be likely to conflict with the policy of the American antitrust laws, Congress, in the Shipping Act of 1916, extended antitrust immunity to such agreements if they were filed with and approved by the predecessor of the Federal Maritime Commission.² The Act also curbed other practices of the carriers that were considered too anticompetitive and which were used to discourage carriers competing with the conferences. First, the Act outlawed the giving of deferred rebates by which a shipper would get a reduced rate on his shipments only after shipping most or all of his goods by a carrier for a certain period of time. Second, the Act outlawed the use of "fighting ships", ships which undercut the competing rates solely for the purpose of driving a competitor out of business. Third, carriers were forbidden to retaliate against shippers by refusing space when it was available or other discriminatory methods. Fourth, carriers were not allowed to make any unfair or unjustly discriminatory contract with a shipper based

on the volume of freight offered.³ In addition, the Act requires that the conference agreement permit freedom of entry into and exit from the conference for carriers.⁴

Left somewhat unsettled was the status of "dual rate" contracts. This is a contract by which a shipper gets a lower rate if he promises all of his cargo to a carrier or conference of carriers. After the Supreme Court decided that dual rate contracts violated the Act,⁵ the Congress authorized those in existence to remain in existence while they studied the problem, and ultimately added a provision permitting dual rate contracts with certain restrictions and subject to the approval of the FMC.⁶ Most of the restrictions operate to protect the shipper: for example, the dual rate contract must be available to all shippers on equal terms, the differential may not be more than 15%, the shipper must be released from his obligation to ship by conference member when space is not available, and either party may cancel on 90 day's notice.

In approving a dual rate contract, the FMC may order a modification. In one case, the FMC ordered a conference to establish five separate dual rate contracts corresponding to the three outbound and two inbound trades served by the conference. The conference had sought to bind the shipper to use of conference carriers on all five trades with one contract. The FMC order was upheld in court because the conference had not proven that the proposed restraint on trade, "was required by a serious transportation need, necessary to secure important public benefits or in furtherance of a valid regulatory purpose of the Shipping Act."⁷

The types of agreements between carriers which are subject to approval by the FMC are enumerated in §15 of the Shipping Act.⁸ The catchall provision suggests the type of agreement with which Congress was concerned: it covers agreements "in any manner providing for an exclusive, preferential, or cooperative working arrangement". The Supreme Court has held that the FMC does not have jurisdiction to approve a merger "agreement" because such an agreement is not an ongoing arrangement imposing continuing responsibilities on the parties.⁹ Similarly, a lower Federal Court has held that FMC jurisdiction over an agreement which is in substance a merger is not obtained by adding supplementary agreements of an ongoing nature (e.g., agreements not to compete) over which the FMC might have jurisdiction.¹⁰ It seems reasonable to assume that FMC approval of a merger was sought to insulate the merger from the effect of the antitrust laws.

The antitrust exemption granted by the Shipping Act may be limited, but FMC approval is necessary in order for any agreement to qualify for the exemption. Where a rate agreement was challenged by a shipper as not having been approved by the FMC, a court could consider a suit for damages under the antitrust law because

"[T]he implementation of rate-making agreements which have not been approved by the Federal Maritime Commission is subject to the antitrust laws."¹¹

However, the case was stayed until appeals were taken from the FMC's finding that the implementation of the rate agreement was not covered by a prior agreement approved by the FMC.

The conferences are expected to be self-policing. In at least one case, proposed provisions in the agreement for policing violations of the agreement by a conference carriers were deemed potentially unfair to the accused carrier. The agreement was approved only after amended provisions were proposed.¹²

In general, it appears that agreements will be approved when the transportation benefits under the agreement outweigh antitrust considerations and other considerations such as discrimination between ports.¹³ For example, the FMC approved an agreement between a port and several carriers for preferential use of new container terminal facilities but disapproved a restriction requiring all container traffic from a certain area to pass through the port.¹⁴ In another case, the FMC conditioned approval of indirect port calls to Portland (accomplished by shipping containers overland from Seattle) provided any carrier offering indirect service made a direct call to Portland on alternate sailings.¹⁵

Carriers may not charge any rate which is unjustly discriminatory between shippers or ports and the FMC may modify a charge to correct such discrimination.¹⁶ Further every carrier and conference of carriers in foreign commerce must file with the FMC a schedule of rates and charges and rates actually charged must be in accordance therewith. Changes may not be effective until thirty days after filing the same with the FMC. The FMC may reject a schedule not filed in conformity with its regulations and thereafter, the rates contained therein would be unlawful. The FMC may also, after a hearing, disapprove any rate found to be so unreasonably

high or low as to be detrimental to the commerce of the United States.¹⁷

Under these rudimentary powers over rates, the FMC found rate structures on some commodities moving between the United States and the United Kingdom to be unreasonably high and a detriment to the commerce of the United States. The FMC ordered that new rates be filed for those commodities and justified.¹⁸ However, tariffs may not be rejected on any basis except the technical grounds involved in the statute and environmental impact is not one of those grounds.¹⁹

The FMC also approved of overland/OCP (overland common point) rates,²⁰ charged by ocean carriers operating to and from Pacific ports in order to compete with Gulf and Atlantic ports for traffic originating east of the Rockies. These rates involve either absorption by the ocean carrier of part of the overland transportation cost, or negotiation of a lower transportation charge on a through bill of lading than the overland carrier charges as a local rate from the port. Such rate-setting (including absorption) was found to be routine rate making which the conference may engage in without further approval of the FMC.²¹

The FMC sanctions the establishment of through routes and rates entered into by ocean carriers with other carriers provided the port-to-port portion of the rate to be collected by the ocean carrier is set out in the tariff along with the names of all participating carriers not subject to FMC regulation and the service to be performed.²²

Joint Rates for Goods in Foreign Commerce

The ICC has made feeble and inconsistent attempts to establish a standard policy for accepting tariffs relating to joint rates for the transportation of goods between points in the United States and foreign countries.

In 1969 and apparently as a result of Congressional prodding, the ICC took the position that it did have authority to accept tariffs covering a joint rate established by ICC regulated carriers in conjunction with ocean carriers subject to the jurisdiction of the FMC.¹ In 1970, comprehensive regulations governing the filing of these joint rates were established by the ICC in the so-called International Joint Rates and Through Rates² case. About six weeks later, the ICC stayed the effectiveness of the order.³ Nevertheless, by special permission, tariffs continued to be accepted on a case-by-case basis. In 1972, the ICC reconsidered the prior case. The ICC decided five to three (three Commissioners not participating) not to promulgate a general rule at that time but rather to reopen the proceeding for reconsideration of the entire record.⁴ There is no evidence that the reconsideration has been completed.

A vigorous dissent criticized the majority for its indecision and for its failure to offer any guidance for those desiring to file joint international rates despite assurances that procedures to facilitate this traffic would be established. The dissent suggests in a footnote⁵ that action was postponed on the Trade Simplification Act of 1969⁶ as a result of the ICC's earlier decision to implement joint rates.

The net result does not preclude the filing of international joint rates; the majority even offered equivocal support (but no guidance) for those persons desiring to file joint rates by noting that they are not precluded from following the earlier, suspended regulations.⁷ It appears, however, that special permission to file each tariff must be sought and thus the information to be included in the tariff will be the subject of case-by-case decision until the ICC feels it has acquired the experience necessary to again promulgate a general rule.

Export-Import Rates

The ICC does accept tariffs which provide for transportation between a port and an interior point of exported or imported goods at a rate different from that charged for the same transportation of domestic goods. The fact that goods are being imported or exported is a difference justifying a different rate,⁸ and therefore a different rate is not unreasonably discriminatory.⁹ But both rates must be just and reasonable¹⁰ and meet all other conditions imposed on ICC-regulated rates. For example, the rates may not unjustly discriminate between ports,¹¹ nor may they result in a higher rate being charged for a shorter than for a longer distance without ICC approval.¹²

No common carrier regulated by the ICC is required to establish through routes from interior points of the United States to foreign countries in conjunction with an ocean carrier operating between the United States and foreign ports. However, if the domestic carrier establishes a through route from a port with one ocean carrier, then the ICC may order the domestic

carrier to make similar arrangements with all other
ocean carriers operating from the U.S. port.¹³

IV OIL PIPELINES

The ICC regulates "...common carriers engaged in — ... (b) The transportation of oil or other commodity, except water and except natural or artificial gas, by pipe line, or partly by pipe line and partly by water ..." in interstate commerce.¹ Thus in order to be regulated, a pipeline must be a common carrier, that is, accepting commodities for shipment from all who offer them for shipment, and the pipeline must cross state lines.

A pipeline company which carried only oil produced by it to its own refinery was not a common carrier despite the fact the pipeline crossed a state line.² But the Act was held to apply to a company which transported oil it had bought.³ A pipeline which transports only the products of its own refinery may be required to file reports so that its property can be valued as a means of improving regulation of common carriers,⁴ but it may not be required to file tariffs for this would "make common carriers for hire out of private pipelines whose services were unused, unsought after, and unneeded by independent producers, and whose presence fosters competition in markets heavily blanketed by large 'majors'."⁵ It appears that only rarely will a pipeline be other than a common carrier.

There are no entry requirements for pipelines (other than those carrying natural gas). "Pipeline companies may construct or extend facilities at will; no certificate or other franchise is required. They are not monopolistic or free from competition ..." ⁶ Similarly,

mergers between pipelines or acquisition of pipeline operating facilities are not subject to prior ICC approval under §5(2)⁷ because pipelines are not carriers for purposes of §5 as defined in §5(13)⁸. Nevertheless, a pipeline which wished to acquire a common carrier by water may not acquire a carrier operating through the Panama Canal⁹ and may acquire any other common carrier by water only on a showing that the water carrier will be operated in the interest of the public and without reducing competition on the water route.¹⁰

In the past, pipelines required large minimum tenders for shipment, up to 100,000 barrels, to discourage small shipments. The ICC has decided that a minimum tender of more than 10,000 barrels may not be required¹¹ and has approved, over the protests of railroads, a pipeline rule that gives the shipper one week to assemble his minimum tender.¹²

The rates charged by pipelines are calculated as a rate of return on an annual valuation of pipeline property. Where a shipper is the owner or part-owner of a pipeline company, the pipeline company may not pay the shipper-owner dividends exceeding such stockholder's share of 7% of the company's valuation. Payment of higher dividends previously were found to be an unlawful rebate; the new dividend policy was established by consent decree.¹³

Since most pipelines are owned by the oil industry they serve, there have been continuing efforts to force their separation from the oil industry.¹⁴

Petroleum pipelines are not granted the power of eminent domain by the Federal Government, but must rely

on state procedures. States may find that since the pipeline will be operated and regulated as a common carrier, construction of the line will be for a public purpose and therefore state condemnation proceedings are appropriate.¹⁵ Oil pipelines may be granted rights-of-way by the Secretary of the Interior through public lands¹⁶ but must operate as common carriers,¹⁷ and they may be granted rights-of-way across the outer continental shelf.¹⁸

Petroleum pipelines appear to be regulated not so much as a means of transportation but as an instrument of federal antitrust policy left over from the break-up of Standard Oil. The theory seems to be that forcing a petroleum pipeline to carry crude to independent refiners or petroleum products from the independent refineries will preclude the integrated companies from exercising monopoly power.

Calls for divorcing oil pipeline companies from the "majors" were heard after World War II; these studies have been criticized for ignoring several factors. Increased pipeline size made it desirable for the pipeline company to carry crude for independents. Independent pipeline companies might favor large shippers (the "majors") just as much as present pipelines did. Capital requirements for refineries may have had more to do with the decline of the independents than the control of pipelines by the majors. One study suggested divorcement could only affect about 2.4% of the existing refining capacity. Another suggests that the public policy controls imposed on pipelines were unsuited to the business and incapable of achieving the desired antitrust goal, and therefore concludes, "On balance it

seems warranted to conclude that neither federal regulation nor antitrust action between 1906 and 1959 substantially altered the development of the pipeline sector of the integrated oil industry." 19

V NATURAL GAS

Under the Natural Gas Act of 1938,¹ the Federal Power Commission (FPC) acquired the authority to regulate the interstate transportation of natural gas for resale, or the sale of natural gas in interstate commerce. The Act does not apply to local distribution to consumers or to the production or gathering of natural gas.² The Act was passed to fill a regulatory gap, for it had been determined that individual states could not regulate the rates charged for the interstate transportation of gas,³ though they could (and did) regulate the production or the ultimate distribution to consumers.

Because the Act was passed to fill in a gap where state power was held to be constitutionally inadequate, the Act has received an expansive reading in the Supreme Court. Sales to the interstate pipelines by independent producers came under FPC regulation in 1954.⁴ Then the FPC was told that it could consider the effects of actions which were not subject to its own regulatory authority when considering whether to approve an action within its regulatory domain.⁵ After the FPC acquired the authority to regulate the well-head price of natural gas producers, it was held that a sale of a developed natural gas field was equivalent to a sale of gas at the well-head so that such a sale was within the FPC's jurisdiction.⁶ Finally, with natural gas shortages threatening the national supply, the Supreme Court held that the FPC, in considering curtailment plans, may order curtailment of sales direct to industrial users and not for resale (direct sale) even though the FPC lacked authority to regulate the rates for such sales.⁷

While this result may not have been dictated by the Act, it prevented the anomaly which otherwise might have existed with the FPC empowered to curtail only sales for resale (to consumers) while industrial users, which were likely to have access to alternative fuels, would be able to hold the pipeline company to its delivery contract.⁸

It thus appears that most aspects (with the notable exception of rates) of all forms of interstate transportation of natural gas are subject to some scrutiny by the FPC. Of course, it should also be emphasized that FPC regulation extends only to the transportation of "natural gas unmixed, or any mixture of natural and artificial gas."⁹ Transportation of artificial gas unmixed with natural gas is not within the FPC's jurisdiction though the interconnection facilities for mixing with natural gas are.¹⁰

Before constructing or operating new or extended facilities for the interstate transportation of gas, a natural gas company must obtain a certificate of public convenience and necessity.¹¹ There must be a hearing on the application at which interested parties may express their views on whether the public interest will be served by awarding a certificate.

The statutory criteria for the award of a certificate are not particularly explicit. The findings necessary to the award of a certificate are that the applicant is willing and able to perform the service and to conform to FPC regulations and that the service is required by the present or future public convenience or necessity.¹² Among the factors considered by the

FPC in determining an applicant's ability and the need for the proposed service are:¹³

1. The supplies or reserves of natural gas possessed by the applicant and their sufficiency to meet future demand.
2. The existence of customers in the proposed service area.
3. The adequacy of the proposed facilities.
4. The adequacy of the applicant's financial resources.
5. The reasonableness of the construction costs.
6. The reasonableness of the proposed rates in comparison with the rates charged by competing companies.

Other factors bearing on the public interest have been considered when raised. For example, the end use proposed for the gas may be considered¹⁴ although the use of natural gas to produce steam is not an inferior use per se.¹⁵ The effect of the rates in an unregulated sale may be considered because they will affect the rates for regulated sales.¹⁶ The rates to be charged need not be found just and reasonable before a certificate is granted¹⁷, but the proposed rates constitute a factor of prime importance in determining the public interest.¹⁸ Therefore, the FPC must consider the proposed rates¹⁹, and if they are determined to be unreasonable, the FPC may deny the certificate.²⁰

Savings to the consumer through potential rate reductions and improved reliability of service are proper factors for the FPC to consider.²¹ The benefits of competition may also be considered²² because grant of a certificate to one company to serve an area does not preclude the grant of a certificate to another company

to serve the same area.²³ Antitrust considerations must be weighed although FPC approval of a transaction carries no exemption from the antitrust laws.²⁴ In addition, the FPC may consider whether its decision will encourage the development of new natural gas reserves.²⁵

The applicant for authority to construct a pipeline must file a report detailing the environmental impact of construction²⁶ to assist the FPC in deciding whether the filing of an environmental impact statement under the Natural Environmental Policy Act of 1969²⁷ is required. However, the FPC may be relieved of the necessity of complying with NEPA if compliance would lead to violation of its statutory obligations.²⁸ Denial of authority to construct a pipeline does not require a detailed environmental impact statement even though it is assumed that thereby the use of fuel oil will be increased.²⁹ But where other factors support the grant of a certificate, the additional benefit of a slight reduction in air pollution through the use of natural gas may be considered.³⁰

In approving a certificate application, the FPC may designate the area to be served within which the company may expand without further FPC approval. The FPC may also impose conditions on the certificate to promote the public interest.³¹ Such conditions may be used to reach agreement on reasonable rates to protect the public against excessive rates during the long process of investigating the reasonableness of the rates.³²

Once an applicant is granted a certificate, he may not discontinue the transportation of natural gas

without the FPC approval, after a hearing at which the FPC must find "that the available supply of natural gas is depleted to the extent that the continuance of service is unwarranted, or that the present or future public convenience or necessity permit such abandonment."³³

"[T]he public interest is the ultimate criterion under §7(b)..."³⁴

The reference to the public convenience or necessity means the FPC should find, "that the public interest 'will in no way be disserved' by abandonment."³⁵

Despite the necessity of findings covering the public interest, the FPC may grant abandonment authority contemporaneous with granting the certificate.³⁶ The FPC may hear the complaints of barge owners that conversion of a natural gas pipeline to a petroleum products pipeline will affect their transportation of such products; in fact, the FPC may hear evidence that destructive competition in the transportation of petroleum products would result notwithstanding that such transportation would be subject to ICC regulation and notwithstanding that the ICC does not require that such transportation be certificated.³⁷ Factors to be considered in ruling on an abandonment proposal include environmental factors, the economic effects on pipelines and consumers, and the presumption that a pipeline will continue in service.³⁸

Statutory authority exists for temporary certification or exemption of transportation to meet emergencies,³⁹ but are designed only to meet emergency needs and may not be utilized to provide for long-term sales because the procedural safeguards involved in the certification process are absent.⁴⁰

Merger of two gas pipeline companies through acquisition by one company of the facilities of the other would be subject to FPC approval;⁴¹ acquisition of control through stock ownership would not require FPC approval but might involve antitrust violations. The complex interplay of these factors is amply demonstrated by the tortured history of the attempt of the El Paso Natural Gas Co. to acquire Pacific Northwest Pipeline Co.⁴² El Paso acquired the stock of Pacific leading to an antitrust complaint⁴³ being filed by the Justice Department. One month later, the two companies applied for FPC approval of the acquisition by El Paso of Pacific's properties⁴⁴ apparently motivated in part by a belief that approval of the transaction by the FPC would aid them in the antitrust suit. The Supreme Court however, ruled that the FPC should have awaited the outcome of the antitrust suit because allegations of antitrust violations are relevant to the determination of the public interest.⁴⁵ Thus, even though FPC approval of a merger does not carry an antitrust exemption (as is the case with ICC approval of common carrier mergers),⁴⁶ and even though the FPC has no power to determine whether the antitrust laws have been violated, the FPC must weigh antitrust policies in determining the public interest.⁴⁷

A pipeline company which has acquired a certificate may exercise the power of eminent domain in federal courts in order to acquire its right-of-way.⁴⁸ A pipeline company need not have a certificate in order to exercise state-granted rights of eminent domain.⁴⁹

The power of eminent domain may not be exercised against the United States or other public body. However, a right-of-way through the public lands may be granted by the Secretary of the Interior to a United States citizen or corporation.⁵⁰ Rights of way to leases on the outer continental shelf may also be granted.⁵¹ A natural gas company does not violate its lease terms by failing to commit the natural gas produced to interstate commerce.⁵²

Regulation of natural gas transportation is unusual: the regulation is dependent on the activity of the recipient. That is, since transportation of natural gas interstate for resale is regulated, the FPC does not regulate the rates charged for interstate transmission for immediate use. In addition, the well-head price of natural gas sold to interstate pipelines is regulated though energetic efforts are being made to reduce or eliminate FPC jurisdiction over such sales. For gas produced both by independent producers and by pipeline companies, the FPC has settled on an area-pricing policy which seeks to set rates for an entire field or area at a level adequate to support the financial requirements of the industry and not the individual producers.⁵³

One interesting footnote concerning United States v. El Paso Natural Gas Co., discussed in the text at footnotes 41 through 49 above, is that after some years of litigation and several Supreme Court decisions, Rep. Brock Adams (D. -Washington) introduced in 1972, "... a bill to preserve the merger of the Pacific Northwest Pipeline Co. with the El Paso Natural Gas Co."⁵⁴ The bill, which would have been overruled the Supreme Court's finding of an antitrust violation and order of divestiture, died in committee.

VI NOTES ON RECENT LEGISLATION AND LEGISLATIVE PROPOSALS

As previously noted, the Railroad Revitalization and Regulatory Reform Act of 1976¹ altered the basis of railroad rate-making. Part of the change limited the ICC's power to consider the competitive effect of railroad rates on other modes of transportation.² This will undoubtedly have some effect on inland water carriers' rate-making, though it is impossible to predict the effect. Presumably, the inland water carriers remain apprehensive about predatory or discriminatory rates, geographic discrimination in rates, or "sharp-shooting"-rate reductions in a narrow area designed to drive a specific competitor out of business.³

Apparently no specific legislation has been introduced dealing with the specific concerns of the inland water carriers. One other concern that surfaced in testimony on comprehensive transportation reform bills was with the impact of private carriers on the common carriers. Since some private carriers hold certificates or permits, they may carry proprietary cargoes one way without regulation and then bid for regulated cargo on the return trip. It is argued that private carriage skims off the most profitable traffic leaving the dregs for the common carriers.⁴

General reform for all modes of transportation apparently has not been acted upon because of the pressure of passing railroad regulatory reform. One prior attempt to alter the regulation of all modes was the Surface Transportation Act of 1971.⁵ One relevant provision of this bill would have required the unregulated bulk carriers to file their rates with the ICC along with other reports.⁶

The only known pending proposal relating directly to the inland water carriers is a proposal to establish a Federal Inland Waterways Administration in the Department of Transportation. No action has been taken on this proposal.⁷

A bill to extend the coastwise laws to the Virgin Islands "with respect to the transportation of crude oil, residual fuel oil, and refined petroleum products" was the subject of a hearing before the Senate Commerce Committee on Feb. 25, 1976.⁸

No bills are known which affect oil pipeline regulation. Nor are any bills known affecting the Shipping Act of 1916 and 1920, the Merchant Marine Act of 1936 and the 1970 Act. The Energy Transportation Security Act of 1974,⁹ pocket vetoed on December 30, 1974, would have required 20% of all imported oil (rising to 30% by June 30, 1977) to be carried on privately owned U.S. flagships if available. Until U.S. ports for super-tankers could be built, the quota could be reached by crediting shipments between foreign ports in U.S. flagships. The economic impact was to be softened by reducing the license fees for oil imported in U.S. flagships.¹⁰ It does not appear that any similar bill has had any success in the 94th Congress, nor is there any apparent chance for passage of such a bill in the future as U.S. dependence on oil imports diminishes.

The major legislative battles have been over coal slurry pipelines (which would be regulated by the ICC under current legislation) and deregulation of prices for natural gas producers.

The coal slurry pipeline issue is apparently quite simple. The railroads desire to carry the projected doubling in coal shipments in the next ten years.¹¹

One proposed coal slurry pipeline¹² would cross the property of nine railroads, eight of which refused the pipeline a right-of-way. Therefore, the pipeline has asked Congress to grant it the power of eminent domain. The Senate quickly approved such a bill in 1974¹³ but the bill died when not acted upon by the House. Eleven days of hearings on a similar proposal were held before the House Interior Committee in 1975.¹⁴ Complaints centered on the impact on the railroads of the loss of traffic; the fact that it might be impossible for a coal pipeline to operate as a common carrier and if it did not, there was no "public interest" supporting a grant of eminent domain powers. A re-written bill was introduced to meet some of these complaints.¹⁵ It provided for rate regulation to assure economic parity between pipelines and railroads; prohibited common ownership of coal mining, pipeline, and utility companies; and required pipelines to build extra capacity so that they could function as common carriers. This bill was tabled by the House Interior and Insular Affairs Committee on June 30, 1976, thus effectively killing it for this Congress. Two days later, the Office of Technology and Assessment, a research arm of Congress, announced that it would proceed with its delayed study of the coal pipeline issue. A report is expected in early 1977.

The issue and background of natural gas producer price deregulation are not so simple.^{15.5} In 1975, the

Senate passed a comprehensive bill¹⁶ deregulating new onshore natural gas and, eventually, new offshore natural gas. In the interim, the offshore price was tied to the price of oil produced on federal lands so that the energy cost of both would be equivalent. This bill also extended FPC jurisdiction to the production, transportation, and sale of synthetic natural gas. These provisions were tacked onto a bill to meet an expected shortage of gas during the 1975-76 heating season. These provisions originated in an earlier deregulation proposal which had gone nowhere.¹⁷ This earlier bill had an interesting proposal, which apparently has not re-surfaced in later bills, which would have "Banned direct or indirect joint ventures among major integrated petroleum companies for acquiring any right to develop natural gas or oil on federal lands."¹⁸

The House on Feb. 5, 1976, declined to pass a comprehensive deregulation bill but did vote deregulation for "new" gas produced by small producers (100 - billion cubic feet per year or less). Regulation was continued for an independent producer if it or an affiliate derived 10% or more of its gross profit from operating an interstate gas pipeline, or if major producers had a direct interest in the proceeds or profits of the independent producer. For the major producers, a new national ceiling price, applicable to both interstate and intrastate markets, was to be set. The FPC was directed, as they had been by the earlier Senate bill, to curtail the end use of natural gas as boiler fuel over the next ten years with certain emergency exemptions.¹⁹

The differences between the House and Senate bills left doubt whether conferees could resolve the conflict. The Senate Commerce Committee reported out a compromise bill²⁰ on May 18, 1976 that it was hoped would make possible agreement with the House. "New" onshore gas would be regulated for five years at a price tied to oil produced on Federal lands; thereafter the price would be adjusted at five year intervals. Supplementary provisions relating to end use of gas and jurisdiction of the FPC over synthetic gas are similar to those in earlier bills. This bill has been subjected to continuing attacks.

The whole controversy may be defused, though, by the FPC order in July, 1976, raising from 52 cents per 1,000 cubic feet to \$1.42 per 1,000 cubic feet the price producers are allowed to charge for gas brought into production since Dec. 31, 1974.²¹ Legal challenges to the order can be expected, but unless the rates are enjoined, the support for deregulation may be weakened.

Other Recent Developments

The ICC recently held that all grain transportation in bulk on the inland waterways was exempt from regulation.²² The legislative history of the 1973 amendment to § 303(b) was relied on and interpreted to express a legislative intent that retention of the custom-of-the trade provision (as of 1939) was intended to deny only to sugar the exemption of § 303(b). However, the case has not been concluded as the ICC issued a general order to show cause why this interpretation should not be adopted, and it is reasonable to assume protests will be filed.

An Administrative Law Judge of the FMC found that the Gulf-Europe "Minibridge" rates (for containers shipped by rail from Gulf ports to Charleston, S.C. and then by ship to Europe) do not violate the Shipping Act of 1916 by depriving Gulf ports of traffic naturally tributary to them.²³

The ICC granted an exemption under § 302(e) to a shipper who chartered a towboat fully manned because the shipper would control the use of the ship and suffer the gains and losses (rebutting the claim that an affreightment charter was involved) and because no protestant had shown a willingness to perform the requested service which was of a different type from that previously performed by a common carrier (showing the charter was not substantially competitive).²⁴

POLICY ISSUES

I. INTRODUCTION

The derivation of policy issues in inland water transport, shipping and pipeline transportation within the framework of national transportation policy must include consideration of the many modal aspects embodied in national water shipping, interstate commerce and federal power or energy policy.

There have been many changes recently in public interest, setting of national priorities, congressional approach and administrative execution of transport issues. Some historic developments are shown to be no longer relevant, and changes in economic factors and technological capability introduce many new opportunities as do changes in the form and quantity of demand for the increasing demand for the carriage of goods in bulk or pseudo bulk and the sense of public, congressional and administration opinion for lesser regulation.

These issues are of increasing interest as more and more commodities move within integrated intermodal transportation such as grain barged on inland waterways to a port where these same barges are loaded onto a barge carrying ship.

One major problem in policy formulation, these major bulk transport modes discussed in this paper, is the limited analytical and conceptual capability and experience in water, shipping and pipeline resource and transport policy area. This is basically due to the fact that Congress has for long assumed a very direct role in investment decisions, policy strategy formula-

and implementation of such modal projects without necessarily requiring concerned federal agencies to perform effective and objective evaluation of the public benefits of such projects.

Another problem is the multiplicity of Federal Agency involvement in inland water transport, ports, shipping, pipeline transport and more. Overcoming a long time of accepted policy generated though modal and agency separation is becoming increasingly difficult, although some policy coherence is emerging. One difficulty is the functional separation of advocacy and regulation by federal agencies, including the functions of various government departments such as the Departments of Transportation, Interior, Commerce, State, Justice, HEW, HUD and such agencies as ERDA, EPA and more.

There appear to be major conflicts in agency interest, interpretation of their function, and as a result interpretation of national transportation policy. National modal transport policy is generally interpreted by modal advocacy agencies in a narrow modal sense. Congress has done little to remove this impediment to effective national transportation policy enactment and implementation and as noted before has often supported modal advocacy by legislation. Transportation technology and the form of commodities in transport are changing ever more rapidly. This and the growing interdependence of transport modes makes it imperative for national transportation policy to be defined by a national transportation plan and related programs for its implementation.

II POLICY ISSUES IN INLAND WATER TRANSPORTATION

With over 25,543 miles of navigable inland waterways, over 34% of which has depths in excess of 12', the U.S. has next to the USSR the largest network of inland waterways. Much of this network is established and/or maintained at public expenditure, though much of this expenditure serves other water resource development in addition to inland navigation. During the twelve year period 1957-1969, for example, total federal construction expenditures for inland and intracoastal were \$1.6 billion or about \$133 million/year while expenditures for operation and maintenance in 1969 totalled \$79 million. In addition, there are local (state, municipal, private, etc.) expenditures which generally exceed federal expenditures.

The amount of appropriations for inland and intracoastal waterways has since grown substantially to \$411 million in 1973, (construction, operation, and maintenance). It should be noted, though, that this is minute compared to public expenditures for other modes such as highways (\$23.6 billion in 1973).

Dry and liquid bulk are the principal commodities in inland water transport. Because of their relative low value they require low cost transportation which has for many years been their major attraction to inland water transport. By far the most controversial policy issue concerning inland water transport (IWT) is the imposition of user charges. Some argue the question of equity, such as intermodal equity, equity among different transport users and equity towards taxpayers throughout the nation many of whom are supposed not to benefit from IWT directly. On the other hand,

IWT is not unique in benefiting from federally financed way facilities. In fact basically all modes benefit from such provisions.

Changes of policy in inland water transportation have been under discussion for many years. The so-called Doyle Report, prepared for Congress in 1961, provided several ideas for policy changes. Among the recommendations relating to inland waterways which are still pertinent are the following:

(1) Redefine bulk commodities so that transportation of such commodities would not be limited by 1939 technology. The suggested definition of a bulk commodity was one shipped without wrappers, containers, mark or count and such that delivery of any minimum quantity was adequate because the commodity was fungible.

(2) End the distinction between towing and freighting authorities, and permit uniform definition.

(3) Give the operator on a main stream priority on new rights to operate on tributaries; give operators on tributaries priority for new rights on main stream. There is some evidence that this result has been reached in some cases without establishment of formal priorities. Therefore, there may not be a problem in practice.

(4a) Establish a new licensing category of for-hire bulk cargo carriers serving the general public with grandfather rights. Under the report's suggestion, these bulk carriers would have been restricted to exempt cargoes in tow or in the vessel while common carriers would be allowed to carry regulated and exempt cargoes (as they now are under amendments to § 303(b)).

(b) Authorize operations by a bulk carrier over an entire waterway system without point-to-point restrictions.

(c) Authorize operations by a bulk carrier on proof of applicant's fitness and ability only, but permit a protestant to prove that authorization would result in excessive competition, in a violation of the national transportation policy, or would be contrary to the public interest.

(d) Require filing by the bulk carrier of minimum rates with control based on cost formulas and designed to assure a reasonable return to efficient operators.

(e) Give such licensed bulk carriers priority in issuance of common carrier certificates for the waterway served.

(f) Repeal present bulk exemption sections, §§ 303(b), (c), and (d), along with establishment of new licensing category.

Other areas in which there appear to be manifestation of underlying policy, either explicitly or implicitly, are noted briefly here, but not discussed.

(5) It appears to be the policy that railroads shall own no other system of transportation. While this has not made it impossible for railroads to operate trucks or water carriers, the railroads have a harder time justifying intermodal ownership.

(6) While it is doubtful that any simple statement can express the ICC and Congressional views of competition, there is some evidence that competition is desired to stimulate innovation and improve service but

that competition merely designed to destroy competitors is not desired.

(7) It sometimes appears that innovation is approved if it does not upset the competitive balance, although this may be an unfair reading of sentiments concerning destructive competition.

(8) A long-standing debate has been whether user charges should be imposed on the nation's waterways. The National Waterway Conference takes the position that waterways operators are entitled to the benefits of free navigation as part of a Governmental policy dating back to the founding of the country. The Doyle Report refutes any claim that the Government lacks the authority to collect tolls although presumably repeal of part of the Rivers and Harbors Act of 1882 would be required. With increased federal aid to railroads, it may be that this controversy will subside (or become more insoluble). While user charges have frequently been recommended, it may be that proposals have foundered on the practical problems of attempting to ensure that the person charged has received some service commensurate with the charge and of separating costs of navigation-related services from e.g. flood control services.

Resolution of the user charge issue would be likely to have broad impact. Just one small example will be mentioned. Barges provide low cost service and this has been said to be part of their inherent advantage. Benefits provided by the public (highways, waterways) do not enter into a determination of cost advantage (such determinations may be obsolete with amendment of § 15a(3)). A user charge would enter calculation of a barge service cost. Barge service over expensive (in user charges) waterways might cease being competitive.

(9) There is some doubt, after the Railroad Revitalization & Regulatory Reform Act (RRRRA) of 1976, how competitive intermodal competitive rate-making (e.g. rail competing with barge) should be.

(10) The RRRRA of 1976 established an office of rail public counsel. Perhaps DOT attorneys might be authorized to intervene in ICC proceedings to assert the interests of the national transportation policy.

(11) Should an attempt be made (especially in the case of barges) to include public costs if barge rates are to be compared with the rates of any other mode? Should total cost of barge transportation be analyzed rather than cost to shipper in planning national transportation policy?

(12) After reading quite a few cases, it is not entirely clear what purpose is served by certification. It does bring the carrier under rate regulation; it does preclude possibly excessive demands on other carriers for through routes and inter connections.

(13) Similarly, is regulation of water carriers really necessary? Spychalski (as summarized by Blood) argues regulation is not really needed. However, Blood* also notes that his premises, though widely accepted, have not been the subject of empirical research.

Regulation may promote regular service and adequate service without interruptions due to business failures. The Doyle report took as a given that some regulated transportation was necessary to assure adequate service and unregulated transportation should not be allowed to weaken the regulated sector.

* "Blood, Dwight M., Inland Waterway Policy in the U.S., Feb., 1972".

(14) The ICC seems to favor increasing size of the barge company through growth or intra-modal merger. Similarly, in inter-modal mergers, an increased financial base may be a factor in approving the merger or it may be an indication that the new company would have such an advantage that competition will be destroyed.

(15) The ICC has indicated approval of the idea of carrying truck trailers on barges or other vessels ("fishyback") but it is not known whether the ICC has been confronted with any specific proposals.

From the above list of pertinent IWT policy issues, it is apparent that there is no cohesive national water policy and as a result no national transport objectives within which IWT policy issues can be evaluated. At this time policy still evolves as a result of specific purposes and projects such as the recent RRRRA (1976).

In general, IWT policy develops as a result of decisions on individual issues and projects and their choice is considered on economic, political, strategic, environmental or other basis, but seldomly on merit alone. Neither are policy issues resolved on the basis of integrated transport needs independent of the fact of the existence of a national transportation policy.

III POLICY ISSUES IN SHIPPING

Maritime Policy

The first maritime policy legislation was the introduction of preferential tariffs that imposed a higher duty on imports carried by foreign bottoms than by U.S. bottoms provided in 1789. The need to maintain the U.S. flag shipping induced the Government to provide aid to U.S. shipping in the form of ocean mail contracts. The first come in 1845. This form of financial aid was further supplemented and expanded by laws enacted by the Congress in May, 1864 and in March 1891. Despite such aids, ship ownership was a financially risky undertaking.

As a result, the United States had virtually no merchant marine at the outbreak of World War I. It was completely unable to provide the shipping service needed to maintain its economy and provide for military shipping. These factors led to the Shipping Act, 1916, which became the underlying basis for the regulation and development of the U.S. Maritime Transportation. This statute also created the United States Shipping Board, and categorized certain practices in the industry as unfair and declared them to be illegal.

The act authorized organization of the Emergency Fleet Corporation to carry out a ship building and ownership program to support the war effort. By early 1920 the Government had built or acquired over 1750 merchant ships.

In Section 33 Congress expressly stated, however, that its action should not be construed as affecting the power or jurisdiction of the ICC and that the act should not be construed to apply to interstate commerce.

The apparent thrust of this section is retention of the complete autonomy of the ICC and recognition that jurisdictional or policy conflicts should be resolved in favor of the ICC. By legislative enactment, the ICC has been given jurisdiction over coastwise and inter-coastal shipping.

The end of World War I brought an end to the need for a Government-owned merchant fleet. The Merchant Marine Act of 1920 was enacted for the purpose of effecting disposal of the fleet acquired under the act of 1916.

This policy was reaffirmed by the Merchant Marine Act of 1928, which contained additional provisions for ocean mail contracts.

In Title I the Merchant Marine Act of 1936 contains a policy declaration similar to that of the 1920 act. Section 212 provides that the United States Maritime Commission created by the 1936 act replace the United States Shipping Board.

These basic objectives were again reaffirmed by the Merchant Marine Act of 1970, which expanded support to all types of vessels in the essential U.S. foreign trade and thereby qualified foreign going bulk carriers and other non-liner vessels for CDS and (under some conditions) ODS. It furthermore expanded the merchant shipbuilding program with a plan for the construction of 300 new vessels over a ten year period. CDS was to be gradually reduced from 55% in 1970 to 35% in 1976 and phased out all together at the end of this decade. The Act recognizes the increasing importance of foreign trade and offshore developments and the enhanced role of the U.S. flag merchant marine in the economic growth and security of this country.

On the other hand some recent studies have questioned the economic contribution of the U. S. Merchant Marine. In 1974, for example, about \$500 million were spent in direct and about \$200 million in indirect subsidies to the U.S. foreign going merchant marine during that year. The subsidy cost is then nearly \$1.0 per dollar of foreign exchange earned and nearly \$0.42 per dollar of revenue.

Federal involvement in domestic and inland water transport is by comparison very small in terms of expenditures as a percentage of revenue.

The Maritime Administration is the federal agency responsible for allocating all forms of government aid and service to the Merchant Marine. Through its Subsidy Board it determines eligibility for subsidy. It runs the Federal Merchant Marine Academy at Kings Point, controls issuance of "mortgage guarantees," war risk insurance coverage, support for state and civilian nautical schools, undertakes Maritime Research and Development, administers the National Defense Reserve Fleet and the Associated Ship Trade-In and Exchange Programs in addition to support of the general commercial development of the U.S. Merchant Marine.

The agency has responsibility for the following major programs:

Title V Construction Differential Subsidy (CDS)

The CDS subsidy calculation is usually based on the lowest cost foreign bid for an equivalent vessel submitted by a qualified foreign builder. This is determined by Maritime Administration's representatives at various U.S. Embassies abroad.

There is some question regarding the validity of bids or cost estimates submitted by foreign sources for this purpose. The 1970 Merchant Marine Act modified the construction subsidy title to restrict subsidy payments there under to a declining fixed percentage of costs and assumed a phase out of Title V by 1980. The basis of this subsidy is simple cost parity. Since 1970 all new ships constructed for service in the essential foreign U.S. trade qualify for CDS.

Title VI Operating Differential Subsidy (ODS)

The operating differential subsidy is also based on the cost-parity principle. It was restricted like CDS to liners serving essential foreign trade route, a restriction lifted by the 1970 Act. The basic principle of the policy is stated in the 1936 Act and essentially maintained as given in Section 601a.

Title XI Federal Ship Mortgage & Loan Insurance Program

Perhaps the most "successful" of all government activities connected with the merchant marine is the Title XI Federal Ship Mortgage Insurance Program.

The United States Government insures commercial loans and mortgages to finance a fixed proportion (up to 87.5%) of the "actual cost" of construction, reconstruction, or reconditioning of U.S. built merchant, inland water, oceangoing tugs and barges and some other type vessels. This insurance is authorized and defined by Title XI of the Merchant Marine Act of 1936 as currently amended. The general guidelines for its implementation are contained in Title 46, Chapter 11, Subchapter D, Part 296 of General Order 29 as it is

revised in the Federal Register. The program is administered by the Secretary of Commerce acting through the Assistant Secretary for Maritime Affairs (Head of the Maritime Administration).

Title XI mortgage insurance extends over the economic life of a vessel (up to 25 years, while most foreign countries offer vessel financing for a maximum duration of only seven years). The statutory limit on total principal and interest which may be insured under the Title XI program is now \$3 billion (recently raised from \$1 billion by the 1970 Merchant Marine Act).

Preference Acts

There are a number of Preference Acts and Public Laws which authorize or direct government agencies to ship preferentially and at negotiated non-competitive term on U.S. flag vessels. Cargoes so covered are foreign aid cargoes, food for peace, military assistance cargoes, household articles of federal employees including military personnel and all types of cargoes owned by or shipped for or on behalf of the federal government.

Some components of preference cargoes such as agricultural goods shipped under Public Law 480 are usually shipped 50% in U.S. bottoms provided shipping capacity is available at "reasonable" rates. The freight rates allowed U.S. operators under preference laws are usually such as to allow fair and reasonable profits to the marginal operators offering shipping capacity.

There are many disagreements over the role and effectiveness of Federal regulation of and aid to U.S. Maritime Transportation. It is obvious that the established objective of maintaining a viable and sufficiently large Merchant Marine in foreign trade is not accomplished notwithstanding the massive expenditures of direct and indirect aid and some U.S. flag discriminatory regulation.

In domestic shipping the needs are effectively met under the protective umbrella of existing cabotage laws. Inland water transportation has grown rapidly in recent years. This segment benefits greatly from the controversial issue of U.S. Army Corps of Engineers inland water system improvement program.

The most important criticism is probably the lack of Federal Transportation policy coordination and long range planning and the resulting failure to develop effective, desirable, and achievable comprehensive goals and objectives. One cause may be the decentralized administrative and legislative structure with thirty-two Federal agencies and twelve major congressional committees responsible for transportation policy and program. More than half of these agencies and committees have responsibilities in Maritime Transportation.

There is increasing criticism of federal economic regulation particularly the effects of lack of planning and coordination of modal economic regulation. Several proposals have been offered for the integration of modal regulatory agencies. Another problem is the insufficient coordination between Federal Regulatory and Aid Involvement in Maritime Transportation.

As a result and under present legislation the interests of the U. S. government are often in direct opposition to those of the operators as well as those of the shippers. Both subsidy and cargo preference costs continue to rise. Indirect subsidies have generally been a source of friction in international relations and have already resulted in some countermeasures by foreign competitors. There are ways by which changes in policy and regulation may improve U. S. Maritime transportation such as: liberalization of tax clauses relating to reserve funds and capital investments (including terminal construction, containers, wheelbody, dockside equipment, finance, etc.), extension of international agreements on trade liberalization, documentary simplification and reduction in inspection and formality requirements for cargoes and vessels in international trade, repeal of recapture of "excess profit" clauses and various other counterincentive measures. The most important policy and regulatory changes are in measures which encourage new investments, improved management and more responsive operations in U. S. Maritime Transportation. Existing legislation has proven not to provide the incentives necessary for expansion nor efficient operation of U. S. international shipping in particular. In general, it can be stated that government aid tied to government management, regulation or influence does not work and that subsidies and preferences are effective only when they create sound commercial operations which can eventually stand unaided.

There is an urgent need for the United States to adopt a National Maritime Policy and Program and to enact required legislation designed to create an

adequate merchant marine, consisting of advanced ships of all kinds, sufficient to carry a meaningful part of U. S. foreign commerce and satisfy all emergency transportation requirements as needed for the economic health and military posture of the nation. U. S. foreign trade is expected to double in volume between 1976 and 1982, and the U. S. flag carried share of U. S. foreign trade is dropping to levels at which control of discriminatory factors against U. S. foreign trade becomes marginal, and effective competition in the world market becomes difficult. Well over 90% of all U. S. foreign trade is carried by ocean transportation and this is expected to increase as trade with neighboring countries such as Canada and Mexico diminishes in importance.

The following are potential future policy issues affecting U. S. shipping:

1. Flat Rate ODS & CDS

Operating Differential Subsidies (ODS) are designed to assure parity of U. S. operating costs with lower foreign costs for crew wages, liability insurance, and other specific items on particular trade routes. Subsidized U. S. operators have as a result insufficient incentives for resisting exorbitant wage and other cost increases because the Government would absorb much of the increases through higher ODS payments.

Similarly, the present system of granting Construction Differential Subsidies (CDS) as a percentage of total costs allows the ship-owners to pass on many "custom" design features. This tends to work against the least cost design consistent with the requirements of the intended service.

Establishment of fixed levels of ODS subsidy for a five year period. Any increased costs above the levels indicated by the GNP deflator would be borne by the operators.

Similarly the Maritime Subsidy Board should set fixed amounts of CDS (in dollars rather than percentages) for representative sizes of the principal types of ships.

2. Substitution of Tax & Credit Incentives for ODS & CDS

Government support of the U. S. Merchant Marine is by direct subsidies. This could be changed to aid exclusively by indirect subsidies, in the form of tax and credit incentives to achieve the same general objectives. It may also provide a more stable basis by eliminating dependence on annual legislative appropriations.

Substitution of indirect supports for ODS and CDS, and extension of these indirect supports equally to all U. S. flag foreign shipping operations, instead of to "qualified" operators only. Some of the possible approaches may include:

- Subsidize interest rates on ship mortgages and shipyard investment credits, as well as accelerated depreciation of ship investments.

- Changes in ship tax depreciation and permission for reinvestment of ship sales proceeds with deferred tax liability may also be attractive.

- Elimination of ODS, CDS, and preference cargo terms.

- Retention of other provisions of MM 70, including the Jones Act and Title XI.

3. Oil Import License Fee Remission

The U. S. oil import control system was introduced by the 'Oil Import Quota System of 1957' then amended by Presidential proclamation issued on April 18, 1973 (amended again on June 19, 1973). It is based on the President's authority to increase restrictions on imports threatening to impair the national security. The new regulations establish fees for licenses to import petroleum and petroleum products, the purpose of which is to create favorable long-term conditions for increased domestic production of petroleum and for expanding the capacity of domestic refineries and petrochemical plants.

To encourage carriage in U. S. tankers, license fees on imported petroleum and petroleum products so carried, could be remitted.

The present fee schedule is more than sufficient to finance full remission of the difference between U.S. and foreign costs of tanker construction and operation. Such rebates may permit U. S. tankers constructed and operated without subsidy to serve in this trade. This would allow use of U. S. tankers exchangably in both the domestic and foreign trade of the U. S.

Rebate of license fees on all imported crude petroleum and petroleum products that are transported in U. S. built and operated ships with simultaneous suspension of CDS payments on tankers.

4. Essential Trade Route Restriction

Although the Merchant Marine Act reduces restrictions of subsidized liner operators, operating subsidy requirements do stipulate essentiality of trade route

and service frequency as well as basic schedule needed for servicing a particular route. It also imprises detailed government supervision of operators performance, audit of costs and a variety of other restrictions on ship repair, and other service related management decisions. Although more than one subsidized operator may now serve a general route, they are not free to make unilateral service decisions based on management requirements alone. As a result, there is frequent excess service and maintenance of nonprofitable routes or port calls which reduce the profitability to the operator and increase subsidy costs to the Government.

Elimination of essential trade route concept and government requirement to provide specific service quality in terms of routing, frequency, schedule and ship type. Operators should be permitted to use most effective management decision to reschedule, reroute or change level or quality of service within a general concept of trade without government approval. This obviously does not imply that a liner operator may unilaterally give up a route without government (FMC) approval, but that he has the same freedom in berth service terms, that his foreign competitor enjoys.

5. Double Subsidy

Under Existing laws, subsidized operators holding contracts under Title VI of the Merchant Marine Act, as amended, may under certain conditions carry preference and military cargoes.

Preference and other government owned or controlled cargoes should always be offered to non-subsidized U.S. flag operators at fair and reasonable negotiated

rates. If Title VI carriers are selected to carry such cargoes, the government should pay no more than the established world or conference rates or require such operator to repay or reduce subsidy proportionally.

Liner operators normally carry four different categories of cargo preference cargoes:

- (1) P.L. 480 Cargoes (Under P.L. 664)
- (2) Export-Import Bank Cargoes (Under P.R. 17)
- (3) AID Caroges (Under P.L. 664)
- (4) Defence Department Shipments (Act of 1904)

6. ODS To Non-Liner Operators

Section 603(b) of the Merchant Marine Act of 1970 presently authorizes the Secretary of Commerce to pay sums in lieu of the ODS determined under procedures applicable to liner vessels on vessels engaged in an essential bulk cargo carrying service as described in Section 211(b). Under this authority, the Secretary may pay such sums necessary "to make the cost of operating such vessels competitive with the cost of operating similar vessels under the registry of a foreign country."

U. S. operators maintain that such cost parity payments may be insufficient under depressed market conditions to permit U. S. flag vessels to operate at a reasonable profit. Unlike the situation which prevails for liner operators, bulk carriers are exposed to a truly competitive market place. While ODS based on cost parity may not assure a U. S. flag operator a reasonable return, it offers him the same opportunity as his foreign competitor.

Section 603(b) should be amended to permit the Secretary of Commerce to pay with respect to any vessel

in an essential bulk cargo carrying service a variable ODS which provides the necessary incentives for efficient U.S. operators to increase their participation in U.S. bulk trades.

The present law stipulates ODS as a cost parity aid based on comparative cost of a U. S. and foreign flag operator serving the identical trade. As pointed out before, cost parity did not provide significant incentives.

Consideration may be given to link subsidy or government aid to revenue instead of cost, or payment of a fixed amount of subsidy per dollar of revenue earned from carriage of commercial and non-preference cargo.

7. U. S. Response to the 40-40-20 UNCTAD Agreements

Recently a majority of Third World nations have, under an UNCTAD agreement, instituted national preference acts which reserve 40% of their "essential" national ocean borne foreign trade to vessels of the national flag and 40% to vessels of the flag of their respective trading partners. Only 20% of this trade is under these agreements available to 'free' third country shipping. Because few if any Third World nation has the tonnage to carry their 40% share, licenses for such carriage are usually negotiated or sold. As a result, free market competitive auditions are severely limited.

While U. S. flag operators benefit by this on some trade routes, it is counter-incentive and results in the indiscriminate entry of marginal operators on many routes of interest to the U. S. As a result,

shipping costs and therefore U. S. foreign trade costs have unreasonably increased above necessary levels, without accomplishing the basic premise of these agreements which is to permit the establishment of a shipping industry in developing countries.

APPENDIX C

FOOTNOTES

DOMESTIC WATER CARRIERS ;

FOOTNOTES

1. Ch. 104, Pt. I, §1, 24 Stat. 379 (1887), as amended, 49 U.S.C. §1(1)(a) (1970), quoted in Zoll, The Development of Federal Regulatory Control Over Water Carriers, 12 ICC Prac. J. 552, 552-53 (1945) [hereinafter cited as Zoll].
2. United States v. Munson SS Line, 283 U.S. 43 (1931)
3. Zoll at 553.
4. Ch. 3591, §4, 34 Stat. 589 (1906), as amended, 49 U.S.C. §15(3) (1970).
5. 37 Stat. 560 (1912), as amended, 49 U.S.C. §§5(14)-(16), 6(11), (12) (1970). The ICC read this Act as encouraging competition between rail and water carriers and preventing railroads from stifling competition through common ownership. Zoll at 559.
6. 39 Stat. 728 (1916), as amended, 46 U.S.C. §§801-842
7. 41 Stat. 456 (1920) (codified in scattered sections of Part I, 49 U.S.C).
8. 49 U.S.C. §142 (1970) currently provides:
It is hereby declared to be the policy of Congress to promote, encourage and develop water transportation, service, and facilities in connection with the commerce of the United States, and to foster and preserve in full vigor both rail and water transportation.
9. Zoll at 566
10. Denison Act, Ch. 891, 45 Stat. 978 (1928).
11. Intercoastal Shipping Act, ch. 199, 47 Stat. 1425 (1933), as amended, 46 U.S.C. § 843 (1970).
12. 46 U.S.C. §§845a, 845b.
13. Zoll at 448. In its 1932 Annual Report, the ICC summarized its existing jurisdiction over water carriers:

"There is some demand for the further regulation of the rates and charges of water carriers. Their joint rates with connecting rail lines are under our jurisdiction, but not their port-to-port rates, except in instances where we have permitted rail carriers under the Panama Canal Act to continue in control of water carriers."

Annual Report of the ICC, 1932, pp 20, 21, quoted in Zoll at 561 n.39.

14. Transportation Act of 1940, ch. 722, title II, §201, 34 Stat. 929 (1940), as amended, 49 U.S.C. §§901-923 (1970). Throughout the text, sections of part III will be referred to by their section numbers in part III of the Interstate Commerce Act. Thus, §301 corresponds to 49 U.S.C §901 and so forth.
15. 49 U.S.C. §920 (1970). This preserves FMC jurisdiction where not inconsistent with ICC jurisdiction; see discussion of Alaska and Hawaii statehood acts, infra, note 26.
16. W. Jones, Cases and Materials on Regulated Industries 510 (2d ed. 1976).
17. Detroit & C. Nav. Co. v. United States, 57 F. Supp. 81, 82-83 (E.D. Mich. 1944), rev'd on other grounds, 326 U.S. 236 (1945), quoting from Texas & P.R.R. Co. v. Gulf, C. & S.F. R.R. Co., 270 U.S. 266, 277 (1925).
18. Act. Sept. 18, 1940, ch. 722, title I, §1, 54 Stat. 899, amended the Interstate Commerce Act, by inserting before part I thereof the following provision entitled "National Transportation Policy": "It is hereby declared to be the national transportation policy of the Congress to provide for fair and impartial regulation of all modes of transportation subject to the provisions of this act, so administered as to recognize and preserve the inherent advantages of each; to promote safe, adequate, economical and efficient service and foster sound economic conditions in transportation and among the several carriers; to encourage the establishment and maintenance of reasonable charges for transportation services, without unjust discriminations, undue preferences or advantages, or unfair or

destructive competitive practices; to cooperate with the several States and the duly authorized officials thereof; and to encourage fair wages and equitable working conditions -- all to the end of developing, coordinating, and preserving a national transportation system by water, highway, and rail, as well as other means, adequate to meet the needs of the commerce of the United States, of the Postal Service, and of the national defense. All of the provisions of this act shall be administered and enforced with a view to carrying out the above declaration of policy".

The origin of the term "inherent advantages" is discussed in McGehee, The Inherent Advantages of Carrier Modes Under the National Transportation Policy, 34 ICC Prac J. 722 (1967).

19. United States v. Pennsylvania R.R. Co., 323 U.S. 612, 618-19 (1944).
 20. 83 ICC Ann. Rep. 88 (1969).
 21. Great Lakes: Statement of Gilbert R. Johnson, Counsel, Lake Carriers' Association, Common Ownership by Regulated Carriers: Hearing on S. 452, S. 1353, S. 1354, S. 1355 and S. 2139, before the Surface Transportation Sub. Comm. of the Senate Comm. on Interstate and Foreign Commerce, 86th Cong., 1st Sess., 68 (Comm. Print 1961) [hereinafter Common Ownership - Hearing].
- Inland waterways: Union Mechling v. United States, 390 F. Supp. 391, 402 (W.D. Pa. 1974)
22. 83 ICC Ann. Rep. 122 (1969) (Appendix B, Table 4)
 23. Id. 131 (Appendix G, Table 1).
 24. Id. 132 (Appendix G, Table 2).

25. D. Locklin, Economics of Transportation 37 (7th ed. 1972) [hereinafter cited as Locklin].
26. By the Alaska Statehood Act §27(b), Act of July 7, 1958, Pub. L. No. 85-508, §27(b), 72 Stat. 339 (printed as a note before 48 U.S.C. §21 (1970)), and by the Hawaii Statehood Act, Act of Mar. 18, 1959, Pub. L. No. 86-3, §18, 73 Stat. 4 (printed as a note before 48 U.S.C. §491 (1970)), transportation to or from Alaska or Hawaii remains subject to regulation by the FMC. See Alaska S.S. Co, Alaska "Grandfather" Appl., 325 ICC 196 (1965); L. E. Erickson & Ed. W. Wolf Alaska "Grandfather" Appl., 325 ICC 276 (1965) (interpreting "high seas"). The ICC does regulate interstate commerce not on the high seas between points in Alaska. 49 U.S.C §909(a) (1970).
 However, under the Rivers Act, Pub. L. No. 87-595 (1962), common carriers by motor vehicle may establish interstate motor-water through routes between Alaska or Hawaii and any other state, notwithstanding that the water carrier might be regulated by the FMC. §216(c), 49 U.S.C. §316(c) (1970).
27. Cornell Steamboat Co. v. United States, 53 F. Supp. 349 (S.D.N.Y. 1943) aff'd, 321 U.S. 634.
28. Pennsylvania R.R. Co. v. United States, 55 F. Supp. 473 (D.N.J. 1943), aff'd in part, rev'd in part, 323 U.S. 612 (1944).
29. 49 U.S.C.A. § 902(i)(2) covering such a combined shipment does not expressly require the water portion be from a point in one state to a point in another state.
30. 49 U.S.C. § 903(k) (1970).
31. 49 U.S.C. § 902(i)(3) (1970).
32. 46 U.S.C §§ 801 et seq. (1970).
33. See 40 ICC Prac. J. 52 (1972). The LASH System is briefly discussed and joint release no. 132-72, May 12, 1972, by the FMC and the ICC is quoted. The statement provided that the ocean carrier must file the rates for the entire service from port-to-port with the FMC even though some part of the service might be provided by a carrier subject to the ICC.

The inland carrier doing the towing, if not controlled by the ocean carrier, will be subject to the ICC's regulations because transshipment will have occurred.

34. Port Royal Marine Corp. - Declaratory Order - "LASH" Operations, 344 ICC 876 (1974).
35. Port Royal Marine Corp. v. United States, 378 F. Supp. 345 (S.D. Ga. 1974), aff'd mem., 420 U.S. 901 (1975).

Both the ICC and the court relied heavily on the earlier ICC case of Sacramento-Yolo Port District, Petition for Declaratory Order, 341 ICC 105 (1972) which held that lifting containers off a ship and onto a barge was transshipment, subjecting the person towing the barge to ICC regulation. The outcome in the specific factual setting of the Sacramento case, that of a municipal port authority providing towing in lieu of a port call by the ocean-going vessel, was overturned legislatively, jurisdiction over such towage being vested in the FMC. 46 U.S.C. § 804 (Supp. IV, 1974).

The court also observed that the Departments of Justice and Transportation and the FMC contended the ICC was without jurisdiction over LASH operations. 378 F. Supp at 347 n.1.

36. 49 U.S.C. § 910 (1970). See also text at notes 116-121, infra.
37. 49 U.S.C. § 902(d) (1970).
38. 49 U.S.C. § 905(a) (1970).
39. 49 U.S.C. § 902(e) (1970).
40. Id.
41. Barrett Line, Inc. v. United States, 326 U.S. 179 (1945) (5-4 decision). The decision recounts the history of the provision which passed through a stage in which furnishing vessels to any person was regulated (abandoned because of fears the regulation of lessor would be influenced by lessee - carrier's operations), another stage in which furnishing vessels was not transportation and was therefore exempt, and finally entered its final form by which the furnisher is regulated (unless exempt) if the vessel is furnished to a non-carrier, (under § 302(e)) but

the carrier is regulated if the vessel is furnished to a carrier, (under § 303(f)(2)). Accord, De Bardeleben Coal Corp. v. United States 54 F. Supp. 643 (W.D. Pa. 1944). See also note 120 infra.

42. In American Range Lines, Inc., Contract Carrier Application 260 ICC 362 (1944), a carrier which had contracts with 13 shippers and which claimed that it carried full cargoes for one shipper or large shipments for a few shippers was granted a "grandfather" permit (based on pre-1940 operations) because it did not hold itself out to the public. However, it was restricted to carrying specific commodities in lots of 500 tons or more for not more than three shippers on any one voyage.

The factors in the text are a synthesis of factors mentioned in the above case and elements of service discussed in common carrier cases.

43. Indian Towing Co., Contract Carrier Application, 309 ICC 473 (1960).
44. 49 U.S.C. § 903(b) (1960). This section was amended in 1973, Act of Dec. 27, 1973, Pub. L. 93-201, § 1, 87 Stat. 838, to eliminate a limitation of three commodities per vessel where a vessel included all vessels constituting a tow, and to eliminate an interpretation that the exemption was lost when a single non-exempt commodity was also transported. The Senate Report on the bill, Senate Report # 93-513, 93d Cong., 1st Sess., is printed in 1973 U. S. Code Cong and Adm. News 2923. This report indicates that sugar is the only major commodity not transported in bulk in 1939. It also indicates that the ICC sought to require filing of rates for the transportation of commodities in bulk. Additional background is found at 1970 U.S. Code Cong & Ad. News 5155 and 40 ICC Pract. J. 636 (1973).
45. Bulk transportation in 1939 need not have been by water; in A.L. Mechling Barge Lines, Inc., Investigation of Operations, 325 ICC 745 (1965), the company convinced the ICC that carriage of alumina was exempt because alumina was transported in bulk in 1939 although by rail and not by water; therefore the carrier was not engaging in any unauthorized transportation. The purpose of the restriction was

to prevent shifting of in-container transportation to in-bulk transportation in order to escape regulation or to prevent shifting modes in another manner to escape regulation. The latter reason is not very persuasive, for the result of the decision is to shift alumina from regulated (rail) transportation to exempt water transportation.

46. Union Mechling Corp. v. United States, 390 F. Supp. 411, 415 (W.D. Pa. 1974).
47. Id.
48. Bulk Food Carriers, Inc. - Exemption Application, 326 ICC 106 (1965).
49. 49 U.S.C. § 903(d) (1970).
50. 49 U.S.C. § 903(c) (1970).
51. Comment, Regulation of Water Carriers by the Interstate Commerce Commission, 50 Yale L.J. 654, 659 (1941).
52. 49 U.S.C. § 903(g)(1) (1970). Order exempting portions of New York and Philadelphia harbors, 49 C.F.R. § 1070.1 (1975). Such exemptions may be revoked as indicated in text at note 57 infra.
53. 49 U.S.C. § 903(h) (1970).
54. 49 U.S.C. § 903(e)(2) (1970).
55. The restriction to contract carriers appears to have been read out of the statute by the ICC in Pan-Atlantic S.S. Corp - Exemption, Section 303(e), 285 ICC 752 (1956). There, the ICC exempted certain operations of a common carrier and found that § 310, prohibiting dual operating authority, did not apply because under the exemption, the carrier did not receive contract carrier operating authority. 285 ICC at 755.
56. Seatrains Lines, Inc. v. United States, 152 F. Supp 629 (D. Del. 1957).
57. § 303(l), 49 U.S.C. § 903(l) (applies to exemptions under subsections (e) and (g)).
58. 49 C.F.R. §§ 1011.1 et seq. (1975).

59. Warner v. United States, 97 F. Supp. 580, 582 (W.D. Tenn., 1950), aff'd mem., 341 U.S. 907 (1951).
60. Pan-Atlantic S. S. Corp - Exemption, Section 303(e), 285 ICC 752 (1956), aff'd sub nom. Seatrain Lines, Inc. v. United States, 152 F. Supp. 619 (D. Del, 1957), aff'd mem., 355 U.S. 181. It is amusing that the Pan-Atlantic exemption was granted based on the findings made in granting Seatrain a similar exemption several years earlier, 285 ICC at 755, yet Seatrain was one of the protestants in the Pan-Atlantic case.
61. 326 ICC 106 (1965).
62. If the shipment were not intercoastal (i.e. through the Panama Canal) the carrier would be entitled to the bulk commodities exemption of § 303(b). Id., at 109 n.3.
63. The ICC noted that there was no existing rail tariff for carrying the commodity and no evidence that it ever had been carried by rail except experimentally. Though the railroads did carry the commodity from Wyoming to California, this was not deemed competitive with carriage from Florida to California.
64. The ICC relied on the earlier case of Pan-Atlantic S.S. Corp Exemption, Section 303(e), 285 ICC 752 (1956), discussed supra, text at note 60. In another case, the ICC decided it was not possible to find that transporting loaded truck trailers by water was not substantially competitive with another mode of transportation. H.E. Savage, Jr., Application, 260 ICC 603 (1945).
65. 49 U.S.C. § 902(e) (1970).
66. G. M. Cox Shipyard, Inc., Applications, 260 ICC 20 (1943). "Regulation of applicant and other furnishers of vessels, as contemplated by section 302(e), results from their position in the national transportation system. They provide a pool of equipment from which other carriers draw during emergencies and peak-load periods. Unregulated use of this pool of equipment by shippers well might place them in the position of being able to use the charter market as leverage to enforce their demands for unreasonable rates and discriminatory service from common and contract carriers."
Id. at 21.

67. Boylan v. United States, 310 F. 2d 493 (9th Cir., 1952). See also note 69, infra.
68. The cases seem to bear out the similarity. Compare A. J. Cenac and C.J. Cenac Applications, 260 ICC 818 (1943) ("Furnishing of vessels to persons other than carriers subject to the act, for use by them in marine construction between points in Louisiana and Texas exempted from the provisions of part III of the act.") with Warner v. United States, 97 F. Supp. 580 (W.D. Tenn. 1950), text at note 59 supra (transportation for waterway construction).
69. Boylan v. United States, 310 F. 2d 493 (9th Cir. 1952), upheld a conviction under § 317(a) for willful failure to obtain a permit for furnishing a tug to a construction company to tow its materials interstate to its construction site. Regulating vessel furnishers is not unconstitutional as the law is reasonably related to the purpose of preventing pressure on the regulated carriers. Such regulation to achieve the national transportation policy is warranted even if the only beneficiaries of the regulation are the certified common and contract carriers.
70. 49 U.S.C. § 917(a) (1970).

71. 49 U.S.C. § 909(c) (1970).

When Part III was enacted and established entry requirements for water carriers, existing business were given an opportunity to obtain authorization to continue service without any showing of need for the service. These were so-called grandfather rights. Similar rights were later included when Alaska became a state. In passing on "grandfather" applications, the ICC limited the authority granted in terms of kind of service and area of service to the service proven to exist on the data specified and continuously thereafter. Since the prior service was not conducted with an eye on the statutory scheme, the effort to fit a variety of services into the regulatory mold sometimes provides the best indication of the scope of the statutory categories.

72. Mississippi Valley Barge Line Co. v. United States, 56 F. Supp. 1 (W.D. Pa. 1944).

73. Union Mechling Corp v. United States, 390 F. Supp. 391 (W.D. Pa. 1974).

74. 42 U.S.C. §§ 4331 et seq. (1970).

75. cf. H. E. Savage, Jr., Application, 260 ICC 603 (1945) (Application for permit denied for failure to show financial fitness; § 303(e) exemption also denied).

76. Newtex S. S. Crop v. United States, 107 F. Supp 388 (S.D.N.Y. 1952), aff'd mem., 544 U.S. 901.

77. 230 F. Supp. 646, 652 (D.N.H. 1964).

78. Union Mechling Corp v. United States, 390 F. Supp 391 (W.D. Pa. 1974) (shippers' complaints plus shortage of barges at peak harvest season).

79. Atlantic Coast Line RR Co. v United States, 202 F. Supp. 456 (S.D. Fla. 1962); accord, Frank E. Woods Common Carrier Application, 303 ICC 158 (1958) (absence of prior service by water carrier explains limited shipper support). See text at notes 98-102 infra.

80. Igert Extension - Arkansas River, 332 ICC 696, 705 (1968) states:

"In reaching the conclusion that certain additional applicants should be authorized to conduct regulated transportation in the Waterway we have given consideration to the fact that should a plethora of operating authorities occur and result in non use of certificates we are now empowered under section 312(a) of the act, in circumstances therein set forth, to suspend, change or revoke, in whole or in part, a water carrier certificate for non use, should an applicant fail to conduct operations pursuant to certificate terms or the provisions of law. John J. Mulqueen Revocation of Certificate, 332 ICC 389."

81. Union Mechling Corp v United States, 390 F. Supp. 391 (W.E Pa. 1974).
82. Union Mechling Corp v. United States, 390 F. Supp. 411 (W. D. Pa. 1974).
83. Atchison, T. & S.F. Ry. Co. v United States, 300 F. Supp. 1339 (N.D. Ill, 1969), aff'd mem., 396 U.S. 275 (1970) (different kind of service proposed).
84. Ohio River Co., Extension - Lower Mississippi River, 343 ICC 509 (1973). Hall & Sons v. United States, 88 F. Supp. 596, 602 (D. Mass. 1950) is quoted in Norfolk S. Bus Corp v. United States, 96 F. Supp. 756, 761 (1950) as follows:

"The word 'necessity' in the broad statutory formula must not be taken too literally ... as implying that a transportation crisis of major proportions would ensue unless the application were granted. If that were the meaning, the use of the word 'convenience' would be an obvious superfluity."
85. Union Mechling Corp. v. United States, 390 F. Supp. 391 (W.D. Pa. 1974); Ohio River Co. Extension - Lower Mississippi River, 343 ICC 509 (1973) (showing made that traffic on lower Mississippi expected to double by 1980).
86. United States v. Detroit & C. Nav. Co., 326 U.S. 236 (1945). The case dealt with authority to carry new automobiles over the Great Lakes on resumption of new car production, interrupted by World War II.
87. Union Mechling Corp. v United States, 390 F. Supp. 411 (W.D. Pa. 1974), aff'g Sioux City & N.O. Barge Lines Inc., Extension - Mississippi River System, 343 ICC 412 (1973).

88. A. L. Mechling Barge Lines, Inc. Extension - Gulf Intracoastal Waterway, 306 ICC 223 (1959). See discussion at note 95 infra.
89. Union Mechling Corp v. United States, 390 F. Supp. 411 (W. D. Pa. 1974) (claim that present delays were the result of weather conditions and not an indication of inadequate service).
90. Id.
91. 49 U.S.C.A. § 909(e); DeBardleben Coal Corp v. United States, 54 F. Supp. 643 (W.D. Pa. 1944).
92. Coyle Lines v. United States, 115 F. Supp. 272 (E.D. La. 1953)
93. Lukenback S.S. Co. v United States, 122 F. Supp. 824 (S.D.N.Y. 1954), aff'd mem., 347 U.S. 984.
94. Indian Towing Co., Contract Carrier Application, 309 ICC 473, 478 (1960).
95. Ohio River Co., Extension - Lower Mississippi River, 343 ICC 509 (1973). Granting Ohio authority might increase competition with the so-called "Big Five": American Commercial Barge Lines, Federal Barge Lines, Mississippi Valley Barge Line, A. L. Mechling, and Union Barge Line, the last two having merged into Union-Mechling prior to the decision in this case. The Big Five were said to carry an overwhelming portion of the regulated traffic on the lower Mississippi.
- Increasing competition may, on the other hand, conflict with other policies, see A. L. Mechling Barge Lines, Inc. Extension - Gulf Intracoastal Waterway, 306 ICC 223 (1959), although with amendment of § 303(b) (see note 44 supra), the precise holding of this case probably is no longer viable.
96. Igert Extension - Arkansas River, 332 ICC 696 (1968).
97. Atchison, T. & S. F. Ry. Co. v. United States, 300 F. Supp. 1339 (N.D. Ill. 1969), aff'd mem., 396 U.S. 275 (1970). The proposed service was a Pacific coast-wise service utilizing containers filled by the shipper and transported by truck and ship. The last prior service had ended in 1959. Sea-Land Service,

- Inc., Extension - Pacific Coastwise, 329 ICC 447 (1967).
- Accord, Ohio River Co. Extension - Lower Mississippi River, 343 ICC 509 (1973) (applicant evinced willingness to tow LASH barges; competing carriers did not appear to be willing to tow them).
98. The quoted phrase is a reference to the National Transportation Policy, Note before 49 U.S.C. § 1 (1970), quoted at note 18 supra.
99. Frank E. Woods Common Carrier Application, 303 ICC 158 (1958); John I. Hay Co. Extension Milwaukee, 285 ICC 472 (1945); Atchison, T. & S.F. Ry Co. v. United States, 300 F. Supp. 1339, 1342 (N.D. Ill, 1969) (citing the National Transportation Policy that different modes should be developed and stating
" [S]hippers should not be denied the inherent advantages of water transportation merely because of the presence and adequacy of existing motor and rail services."
100. McAllister Brothers, Inc. Extension - Steel, 332 ICC 505 (1968), modified 335 ICC 52 (1969).
101. Schaffer Transportation Co. v United States, 355 U.S. 83 (1957).
102. Atlantic Coast Line R. Co. v. United States, 202 F. Supp. 456 (S.D. Fla. 1962); McAllister Brothers, Inc. Extension - Steel, 335 ICC 52(1969).
103. Union Mechling Corp. v United States, 390 F. Supp. 411 (W.D. Pa. 1974). The National Transportation Policy, supra note 18, includes promotion of "efficient service."
104. Ohio River Co. Extension - Lower Mississippi River, 343 ICC 509 (1973) (single line service more efficient than joint line; also decided that grant would make more barges available to shippers).
105. Sea-Land Service Inc. Extension - Pacific Coastwise, 329 ICC 447 (1967), aff'd sub nom.. Atchison, T. & S.F. Ry. Co. v. United States, 300 F. Supp. 1339 (N.D. Ill. 1969), aff'd mem., 396 U.S. 275 (1970); New England Forwarding Co., Extension - Import Export, 335 ICC 58, 73 (1969).

106. McAllister Brothers, Inc., Extension - Steel, 335 ICC 52 (1969). The extension was sought to ship steel from the West Coast to New York for use in the World Trade Center. The railroads protested (to no avail) that contract carriage was involved since the project would end and the application should be therefore denied.
107. 49 U.S.C. § 909(c) (1970). When a new portion of a waterway is completed, a common carrier wishing to extend its operations must apply for a certificate authorizing such extension no later than the date on which extended operations are instituted. 49 C.F.R. § 1140.1 et seq. (1975). See also note 120, infra.
108. "'Freighting' is a term used to denote transportation by a water carrier when such carrier supplies the cargo space, such as a barge, and also the motive power, such as a tugboat or towboat." Indian Towing Co., Contract Carrier Application, 309 ICC 473, 473 n.1 (1960). The distinction between freighting and general towage applies alike to common and contract carriers.
109. Campbell Trans. Co. Comm. Carr. Appl., 260 ICC 107 (1943). "Authority to perform such towage [providing motive power for propulsion of non-self-propelled vessels furnished by shipper] is not included in the authority granted to water carriers to engage in the transportation of commodities with the use of separate towing vessels. Towage is a distinct type of service or field of operation. Many carriers perform only towage ... Carriers whose certificates or permits do not specifically authorize the performance of towage are without authority to engage in such services." Id. at 110.
- The general transporter of commodities in freighting service who is obliged to furnish equipment to transport the freight, may use shippers' barges as part of its equipment, "so long as it used them for its freighting purposes and did not merely transport them as service to the owners." Callan Road Imp. Co. v. United States, 107 F. Supp. 184, 187 (N.D. N.Y. 1952). This distinction is a reasonable classification under § 304(c). Id.
110. Pittsburgh Towing Co. - Cert. Transfer - Charles Zubik, 317 ICC 661, 668 (1963) (citations omitted).

111. Id.
112. 49 U.S.C.A. § 909(f)
113. 49 U.S.C.A. § 909(g); Warner v. United States , 97 F. Supp. 580 (W.D. Tenn. 1950), aff'd 341 U.S. 907 (1951). See also, on financial ability, note 75, supra.
114. Warrior & Gulf Nav. Co. Extension - Cape Canaveral, 322 ICC 261, 264 (1964). See also, discussing regulation of vessel furnishers, text at notes 65-68 supra.
115. 49 U.S.C. § 909(g) (1970). See also, note 108, supra.
116. 49 U.S.C § 910 (1970)
117. Warrior & Gulf Nav. Co. Extension - Cape Canaveral, 322 ICC 261 (1964).
118. Ingram Corp - Purchase - The Barrett Line Inc., 325 ICC 263 (1965) (purchase of contract carrier by company with a common carrier as a subsidiary.)
119. Pan-Atlantic S.S. Corp. - Exemption, Section 303(e) 285 ICC 752, 755 (1955), discussed supra notes 55, 60.
120. Portland Tug & Barge Co. v. United States, 55 F. Supp. 723 (D. Ore. 1944). A common carrier's certificate was restricted so that it was authorized to furnish barges only to other carriers (§303(f)(2), see note 41 supra) rather than being also authorized to engage in the contract carrier activity of furnishing barges to non-carriers, § 302(e), thus avoiding dual operations.
121. Warrior & Gulf Nav. Co. Extension - Cape Canaveral, 322 ICC 261, 266 (1964); Igert Extension - Arkansas River, 332 ICC 696, 709 (1968) (reserving right in ICC to impose conditions "to insure that said carrier's operations conform to the provisions of section 310 of the act").
122. In Seatrain Lines, Inc., Temporary Authority Application, 285 ICC 83 (1951), the urgent need for service was that service to Savannah had been

interrupted by World War II and had not been reinstated thereafter. Temporary authority was granted after temporary authority to purchase a certificate [§ 311(b), 49 U.S.C.A. § 911(b)] covering New York to Savannah service was denied. In view of the fact that final favorable disposition of the application for permanent authority occurred over three years later, it may be that the showing of urgency in instituting service need not be particularly striking. In Bulk Food Carrier, Inc. - Exemption Application, 326 ICC 106 (1965), it was noted that temporary authority had been granted pending outcome of the permit or exemption application. Nevertheless, there was some indication no other carrier was willing to perform the transportation described there. See also text at notes 61 - 64, supra.

123. 49 U.S.C.A. § 911(a) (1970)
124. Pan-Atlantic S.S. Corp. v. Atlantic Coast Line R.R. Co., 353 U.S. 436 (1957). See 49 C.F.R. § 1131a.1 et seq. (1975) (applications for temporary authority); 49 C.F.R. § 1101.1 et seq. (1975) (extension of temporary operating authority).
125. 49 U.S.C.A. § 905(a) (1970).
126. Pittsburgh Towing Company - Certificate Transfer - Charles Zubik, 325 ICC 460, 471 (1965), rev'd on other grounds, sub rom. Mississippi Valley Barge Line Co. v. United States, 252 F. Supp. 162 (E.D. Mo. 1966), appeal dismissed 385 U.S. 32.
127. 49 C.F.R. § 1141.9 (1975).
128. 49 U.S.C. § 912(a) (1970). Dormant authority may be cancelled for willful failure to comply with § 305(a) concerning furnishing transportation on request after a demand for compliance from the ICC and a hearing. Legislative history is found at 1965 U.S. Code Cong & Adm. News 2923,
129. Mulqueen Revocation of Certificate, 332 ICC 389 (1968) (ordering transportation service be resumed in 90 days or authority would be revoked). See also note 80, supra.

130. 49 U.S.C.A. § 912 (1970).
131. 49 C.F.R. § 1141.1 et seq. (1975).
132. 49 U.S.C.A. § 5(2) (1970).
133. 49 C.F.R. § 1141.3(0) (1975).
134. United States Lines Company (Panama Pacific Line) Certificate Transfer, 260 ICC 355 (1944).
135. Pittsburgh Towing Co. - Certificate Transfer - Charles Zubik, 317 ICC 661 (1963), aff'd 324 ICC 460 (1965), rev'd sub. nom. Mississippi Valley Barge Line Co. v. United States, 252 F. Supp. 162 (E.D. Mo. 1966), appeal dismissed sub nom. Pittsburgh Towing Co. v. Mississippi Valley Barge Line Co., 385 U.S. 32 (late filing), rehearing den., 385 U.S. 995.
136. Mississippi Valley Barge Line Co. v. United States, 252 F. Supp. 162 (E.D. Mo. 1966).

The ICC's view (four of eleven Commissioners dissenting) was that failure to follow the regulations in applying for the transfer was harmless because following the regulations would have had no effect on the outcome.

The case involved the transfer by Zubik of a dormant certificate. The ICC described the intent of § 312 as being "to facilitate transfer not subject to section 5" (325 ICC at 466) and noted that operations may be revived at any time without a showing of need for the service. If the transferor could revive operations without a showing of need and then transfer the certificate, the ICC apparently saw little reason to require the transferee to demonstrate consistency with the public interest in his acquisition of the certificate preliminary to reviving operations. (See note 137, *infra*.) If it did not matter who revived the operations, then failure to disclose an option contract to sell the certificate, even though required to be disclosed by the regulations (49 C.F.R. § 1141.4(b) (1975)), could not affect the outcome.

The court's view was that the record did not indicate that the proposed recipient of the certificate

(Pittsburgh Towing) was financially fit to carry on the operations and that the decision authorizing transfer should be reversed for violation of the regulations by the applicant and for the ICC's failure to follow its own regulations.

Thereafter, since the transfer was ineffective, one Osbourne, with whom Zubik had had the undisclosed option contract, attempted to operate under the certificate in Zubik's name and on behalf of his estate (Zubik having died). Osbourne was enjoined from continuing to evade the regulations. Mississippi Valley Barge Line Co. v. United States, 273 F. Supp. 1 (E.D. Mo. 1967), aff'd mem., sub nom. Osbourne v. Mississippi Valley Barge Line Co., 389 U.S. 579.

137. 49 C.F.R. § 1141.9 (1975).
138. 49 U.S.C. § 5(2) (1970).
139. 49 U.S.C. § 5(4) (1970). But see Ingram Corp. - Purchase - The Barrett Line, Inc., 324 ICC 263 (1965) (transfer of most of Barrett's properties in good faith and under misinterpretation of §5(2) no bar to approval of control under § 5(2)); McAllister Bros. Inc. - Control & Merger-Russell Bros. Towing Co. Inc., 317 ICC 459 (1962) (similar).
140. 49 U.S.C. § 5(2)(b) (1970). A condition may be imposed on a merger that arguably might be prohibited in granting a permit under § 309(g). Ingram Corp - Purchase - The Barrett Line, Inc., 324 ICC 263 (1965). The ICC has claimed the authority, without exercising it, to approve the merger of parallel lines conditioned on the transfer of one operating authority to a third carrier. Union Mechling Corp - Merger - Union Barge Line Corp & A.L. Mechling Barge Lines, Inc., [hereinafter, Union-Mechling Corp. - Merger], 342 ICC 874 (1973) (dictum). See also note 95, supra.
141. 49 U.S.C. § 5(2)(b) (1970).
142. 49 U.S.C. § 5(13) (1970).
143. Valley Line Co. v. United States, 390 F. Supp. 435 (W.D. Pa. 1975), rev'g, Katy Industries, Inc. -

- Control - Cenac Towing Co., 342 ICC 666 (1973). Control of Cenac Towing Co. was sought by the corporation controlling the Missouri - Kansas - Texas Railroad. Cenac derived 5% of its revenues from renting tugs and barges to the petroleum industry, exempted from regulation under § 302(e), see note 68, supra. The remainder of its revenues were derived from transportation exempt under § 303(d) (see text at note 49, supra). Cenac was found to be a carrier subject to the Act. The court's reasoning probably would apply only to discretionary exemptions; thus, a carrier exempt under §303 (b) - (d) would probably not be deemed a carrier subject to the Act for purposes of § 5(2), although the opinion is susceptible to a contrary interpretation.
144. "We hold that Section 5(2) is not applicable to interchanges of carrier equipment which do not effect control of two or more carriers in a common interest." Railway Labor Exec. Ass'n v. United States, 151 F. Supp. 108, 113 (D.D.C 1957), aff'g Railway Labor Exec. Ass'n v. Chicago & N.W. Ry. Co., 298 ICC 69 (1956); see McAllister Light Line, Inc. Purchase, 265 ICC 483 (1948) (no authority needed to buy tug from carrier which was liquidating).
145. "Transactions within the scope of that section [§ 5(2)], whereby carriers are divested of their ability to continue their operations, including those putting a competitor out of business, and terminating his authority ... may not lawfully be consummated without our prior approval". Bekins Moving & Storage Co. - Purchase - A.C. Farrington, 65 M.C.C. 56, 59 (1955). See also note 139, supra.
146. Union Barge Line Co. & A.L. Mechling Barge Lines, Inc.; see note 95, supra.
147. Union Mechling Corp - Merger, 342 ICC 874, 881 (1973). Additional criteria mentioned may relate to the reasonableness of the terms of the agreement, McAllister Bros. Inc. - Control & Merger - Russell Bros. Towing Co., 317 Icc 459 (1962) or the reasonableness of the purpose of the merger, Weyerhaeuser Co. Merger, Weyerhaeuser S.S. Co., 317 ICC 434 (1962), rev'g 312 ICC 778 (1962) (tax saving is a proper objective).

148. Accord, McAllister Bros. Inc. - Control & Merger - Russell Bros. Towing Co., 317 ICC 459 (1962) (no evidence of increased fixed costs); see text at note 140, supra.
149. Estimates of the savings ranged from \$500,000 to \$1,000,000 per year.
150. Each company provided sailings every six days averaging out to one sailing every three days. The merged company would provide one sailing every four days. The ICC noted that a shipper could not take advantage of the average interval of three days because he had to commit his freight to a given carrier. Thus, sailings every four days (merged carrier) was an improvement over sailings every six days (either carrier individually).
151. The ICC cited Northern Lines Merger Cases, 396 U.S. at 491, 509 (1970), noting that mergers should not be limited to preserving "the halt and the lame." The ICC, 342 ICC at 885, also quoted Seaboard Air Line R.R. Co. - Merger - Atlantic Coast Line, 320 ICC 122 129 (1963) as follows:
- "There, however, is no provision in the act which expressly or by implication prohibits the merger of financially strong railroads. The act draws no distinction as between competitive and non-competitive railroads. There is no requirement in either the statute or judicial precedent which limits the Commission's authority to approve mergers to those involving carriers which are insolvent or on the brink of bankruptcy."
152. Four water carriers and a newly merged railroad (Illinois Central Gulf RR) would operate in the lower Mississippi area. See note 95, supra, authorizing a fifth water carrier for the lower Mississippi. The Administrative Law Judge also considered the effect on unregulated traffic and found there would be 454 carriers after the merger against 455 before.
153. See note 95 supra.
154. 342 ICC at 885.
155. McLean Trucking Co. v. United States, 321 U.S. 67 (1944).

156. See e.g. Northern Lines Merger Cases, 396 U.S. 491, 506-514 (1970).
157. McLean Trucking Co. v. United States, 321 U.S. 67, (1944).
158. TTC Corp - Purchase - Terminal Trans. Co., 97 MCC 380 (1965), aff'd sub. nom. Atlantic Coast Line RR Co. v. United States, 265 F. Supp. 549 (N.D. ILL. 1966).
159. Id.
160. Id., 49 U.S.C. §§ 5(2)(b) (Railroad acquiring motor carrier) and 5(16) (railroad acquiring water carrier not operating through the Panama Canal) (1970).
161. TTC Corp - Purchase - Terminal Trans Co., 97 MCC 380 (1965).
162. 49 U.S.C. § 5(14) (1970).
163. 49 U.S.C. § 5(16) (1970).
164. Lake Line Applications under Panama Canal Act, 31 ICC 699 (1965), discussed in Delisi, Coordinated Freight Transportation Service: Legal & Regulatory Aspects, pt. 2, 34 ICC Prac. J. 548, 557-58 (1967) [hereinafter cited as Delisi and part number], and in Locklin, supra note 25, at 863.
165. Delisi pt. 2, supra note 164, at 558.
166. Illinois C. RR Co. - Control - John I. Hay Co., 317 ICC 39 (1962).
167. The ICC considered it likely that Hay's officers would yield to directions from the railroad's directors. "Control, within the meaning of the act, is defined to be the power or authority to manage, direct, superintend, restrict, govern, administer, or oversee. New York C. & St. L.R. Co. Control, 295 ICC 703. An affirmative demonstration of the power to dominate or influence is not necessary. In our opinion, a finding is warranted that Hay would be under the complete domination and control of its parent railroads, and that insofar as its overall policies are concerned it would not be "independent" as contended by applicants." 317 ICC at 52-53.

- 167.5 Operating a barge line only for the benefit of two railroads would be contrary to the national transportation policy preserving the inherent advantages of each mode and the statute permitting railroad control, 49 U.S.C § 5(16) (1970).
168. This finding is presumably motivated by the statutory standard that operation of the water carrier not "exclude, prevent, or reduce competition on the route by water under consideration". 49 U.S.C. § 5(16) (1970).
169. Southern Ry. Co. § 5(15) Application, 342 ICC 416 (1972), aff'd sub nom. American Waterways Operators Inc. v. United States, 386 F. Supp. 799 (D.D.C. 1974).
170. [C]ompetition [for traffic] can be found to exist where the railroad affiliated with the water carrier does not provide a single-line route in competition with the water carrier but has an interline route with a subsidiary or other railroads. 342 ICC at 433.
171. The ICC also canvassed many of its prior cases including Illinois C.R.R. Co. - Control - John I. Hay Co., 317 I.C.C. 39 (1962) and decided that the cases had consistently found competition would be precluded only when parallel rail and water routes were involved. In these cases, the railroad appeared to have an effective monopoly on the parallel water route thus preventing or excluding competition and depriving the public of the advantages of active competition.
172. Common Ownership Hearing, supra note 21, statement of Braxton B. Carr, President, The American Waterways Operators, Inc. at 25; statement of George Peterkin, Pres. Dixie Lines, Inc. for the Inland Waterways Common Carriers Assoc. at 51; statement of Gilbert R. Johnson, Counsel, Lake Carriers' Assoc. at 68.
173. Id., statement of Braxton B. Carr at 25.
174. 49 U.S.C. § 905(a) (1970).
175. 49 U.S.C. § 905(c)(d) (1970).
176. 49 U.S.C. § 4(1) (1970).

177. 49 U.S.C. § 906(a)-(d) (1970).
178. 49 U.S.C. § 907(a), (b) (1970).
179. 49 U.S.C. § 907(g) (1970).
180. 49 U.S.C. § 907(f) (1970).
181. 49 U.S.C. § 907(c) (1970).
182. 49 U.S.C. § 906(e) (1970).
183. 49 U.S.C. § 913(b) (1970).
184. Filing of Contracts by Contract Carriers by Water
(Ex Parte No. 161), 285 I.C.C. 450 (1953).
185. 49 U.S.C. § 907(b), (i) (1970).
186. 49 U.S.C. §§ 1(4), 905(b) (1970). Water carriers may establish through routes with motor carriers, and water carriers to Alaska or Hawaii, but are not required to establish such rates. 49 U.S.C. § 905(b) (1970).
187. See ICC v. Mechling, 330 U.S. 567 (1947); M. Fair & J. Guandolo, Transportation Regulation 190 (7th ed. 1972) citing Through Routes & Through Rates, 12 I.C.C. 164, 166 (1907); 49 U.S.C. § 6(1) (1970).
188. 49 U.S.C. §§ 15(3), 907(d) (1970).
189. 49 U.S.C. §§ 3(4), 905(d) (1970).
190. 49 U.S.C. § 6(11)(a) (1970).
191. A.L. Mechling Barge Lines, Inc. v. United States, 376 U.S. 375, 376 (1964).
192. United States v. Pennsylvania RR Co., 323 U.S. 612 (1945). The Court also argued that the railroad could not discriminate against Seatrain by not interchanging cars while interchanging cars with other water carriers.
193. Dixie Carriers, Inc. v. United States, 351 U.S. 56, 60 (1956). Dixie proposed a joint barge-rail rate, lower than the all-rail rate, by which the

connecting railroad would charge the same rate for its services in either the all-rail or barge-rail rate with the barge line absorbing the differential.

194. ICC v. Mechling, 330 U.S. 567 (1947). The railroads in 1939 began charging the local rate between Chicago and New York for ex-barge grain but not for grain arriving by Great Lakes steamer or railroad. The local rate was 8 1/2¢ per hundred pounds, higher than the through rate. The rate was allowed to go into effect, ICC v. Inland Waterways Corp, 319 U.S. 671 (1943) (reversing District Court injunction), but was challenged in a rate proceeding leading to this appeal. The ICC declared the proper differential was 3¢ which the Supreme Court held was not justified by different costs, noting that ex-lake grain required re-shipping at Chicago but moved at the same rate as ex-rail grain.
195. Alabama Gt. S. RR Co. v. United States, 340 U.S. 216 (1951). An eight year investigation into joint rail-barge differentials from all-rail traffic encompassing water carriers operating on the Mississippi and Warrior Rivers culminated in an order that the connecting railroad would receive the same amount for its services whether it was an all-rail or rail-barge routes the barges absorbing the differential. The railroads claimed to be the low cost mode, that permitting the barges to charge less than railroads destroyed the inherent advantage of the railroads, and therefore, barges should not be permitted to charge less. The Court declared that even if the railroads were the low cost mode, that fact would provide no justification for raising the rates of a competing mode.
196. ICC v. Mechling, 330 U.S. 567 (1947), note 194 supra.
197. 49 U.S.C. § 4(1) (1970), text at note 176, supra.
198. A.L. Mechling Barge Lines, Inc. v. United States, 376 U.S. 375 (1964). The Court said that it was not mandatory to rule on all objections to a rate in a § 4 proceeding but that the ICC should realize that it would make good sense in some cases by preventing the spawning of new hearings. This was such a case: the proceeding was in its seventh year, the rates were in effect, and yet the validity of the rate had not yet been considered by the ICC.

The Court held there were insufficient facts to support the finding that the through rate to the East was reasonably compensatory and no lower than necessary to meet competition. The Court cited evidence that traffic had been diverted from barges with no evidence of additional traffic or profit for the railroads east of Kankakee and Chicago.

199. 49 U.S.C. § 15a(3) (1970). The legislative history of § 15a(3) is briefly recounted in I.C.C. v. New York, N.H. & H.R. Co., 372 U.S. 744, 753-58 (1963).
200. See American Commercial Lines, Inc. v. Louisville & N. R. Co., 392 U.S. 571, 580 (1968).
201. Act of Feb. 5, 1976, Pub. L. No. 94-120, 90 Stat. 31 (known as the Railroad Revitalization & Regulatory Reform Act).
202. Id., § 205.
203. Id., § 203(b).
204. Id., § 202(b).
205. Sen. Rep. No. 94-499, 94th Cong., 2d Sess. 48 (1976), reprinted in 1976 U.S. Code Cong. & Ad. News 31,54.
[T]he Committee wishes it to be clearly understood that it is not endorsing or ratifying the decisions under Section 15a(3) that have been made by the Commission to date. In particular, [the amendments] should not be construed to countenance the Commission's practice of allocating "fair shares" of the transportation market among several modes.
It is not the Committee's intent that the Commission engage as a "giant handicapper" in surface transportation.
206. Act of February 5, 1976, Pub. L. No. 94-120, § 203(b), 90 Stat. 39; Sen. Conf. Rep. No. 94-595, 94th Cong., 2d Sess. 150, reprinted in 1976 U.S. Code Cong. & Ad. News at 157.
207. This analysis would end speculation created by American Lines v. Louisville & N. R.R. Co., 392 U.S. 571 (1968), better known as the Ingot Molds case, and ICC v. New York, N.H. & H. R.R. Co.,

372 U.S. 744 (1963), whether the cost advantage of a carrier was to be determined by comparing variable or fully distributed costs. For analysis of the experience under § 15a(3), see e.g. Rose, Regulation of Intermodal Rate Competition in Transportation, 69 Mich. L.R. 1011 (1971); Coyle, The Compatibility of the Rule of Rate Making and the National Transportation Policy, 38 ICC Prac. J. 340 (1971); McCarney, ICC Rate Regulation & Railmotor Carrier Pricing Behavior: A Reappraisal, 35 ICC Prac J. 707 (1968).

See Lake Carriers' Ass'n. v. United States, 399 F. Supp. 386 (N.D. Ohio 1975) (failure to offer unit train service to lake ports similar to service to Michigan utilities violates § 3(1) as "undue or unreasonable preference" of carrier's traffic over competing mode's traffic; case remanded to ICC to prescribe joint rate for unit train service to ports).

CABOTAGE LAWS:

FOOTNOTES

1. Merchant Marine Act of 1920, § 27, 46 U.S.C. § 883 (1970).
2. For the purposes of the coastwise trade documented under the laws of the United States refers to enrollment within the meaning of Chap 12 Title 46 § 251 et seq.
3. Citizenship of a corporation is defined at 46 U.S.C. § 802. American subsidiaries of foreign corporations meeting statutory criteria may operate vessels in the coastwise trade. 46 U.S.C. § 883-1 (1970).
4. The Secretary of Treasury is given discretionary authority to suspend the application of the Jones Act with respect to the vessels of any country granting reciprocal privileges. This was designed to meet three problems: first to provide assurance of reciprocal treatment for American vessels before suspension of the effect of the Jones Act; second, to surmount a difficulty that if reciprocal privileges were granted to any nation to whom the United States owed Most Favored Nation (MFN) obligations, the privileges would have to be granted to all other nations to which MFN obligations were owed; third, to prevent the intended effect from being dissipated by granting reciprocal privileges for operations in the waters of a flag of convenience (based on a vessel's registry) and not in the waters at the foreign end of a trade route. 1971 U.S. Code Cong. & Ad. News 1950, 1755. The Senate Committee report offers an example of the operations necessitating the legislation. Id. at 1751-52.
5. 119 Cong. Rec. 5092 (1973).
6. Lowry III, Jones Act, 40 ICC Prac. J. 779, 779 n.2, 790-92 (1973).
7. 46 U.S.C. § 883 (1970).

SHIPPING:

FOOTNOTES

1. Maritime Transport Committee of the Organization for Economic Co-Operation and Development, Developments & Problems of Seaborne Container Transport (1971).

2. § 15, 46 U.S.C. § 814 (1970).

3. 46 U.S.C. § 812 (1970).

4. 46 U.S.C. § 814 (1970). One comment on this aspect of the law follows:

The United States trades tend to attract excess world capacity because foreign conferences generally restrict entry and regulate intraconference service competition, and because of the demonstrated ability of United States trade conferences to maintain profitable rates at low levels of utilization.

Note, Rate Regulation in Ocean Shipping, 78 Harv. L. Rev. 635, 652-53 (1965).

5. Federal Maritime Bd. v. Isbrandtsen Co., 356 U.S. 481 (1958).

6. 46 U.S.C. § 813a (1970). Existing contracts were legalized during the study period by Act of Aug. 12, 1958, Pub. L. No. 85-626, 72 Stat. 574.

7. Latin America/Pacific Coast Conf. v. FMC, 465 F. 2d 542, 545 (D.C. Cir. 1972), quoting from FMC v Aktiebolaget Svenska Amerika Linien (Swedish American Line) 390 U.S. 238, 243 (1968).

8. 46 U.S.C. § 814 (1970) provides that agreements in seven categories must be filed with the FMC (the numbers are supplied for convenience):

- (1) fixing or regulating transportation rates or fares;
- (2) giving or receiving special rates, accommodations, or other special privileges or advantages;
- (3) controlling, regulating, preventing, or destroying competition;
- (4) pooling or apportion earnings, losses, or traffic;
- (5) allotting ports or restricting or otherwise regulating the number and character of sailings between ports;

- (6) limiting or regulating in any way the volume or character of freight or passenger traffic to be carried;
 - (7) or in any manner providing for an exclusive, preferential, or cooperative working arrangement.
9. FMC v. Seatrain Lines, Inc., 411 U.S. 726 (1973). Antitrust exemptions by implication are not favored, so the Supreme Court was unwilling to grant anti-trust exemption to mergers without explicit statutory language giving the FMC authority to approve mergers.
 10. American Mail Line, Ltd v. FMC, 503 F. 2d 157 (D.C. Cir. 1974), cert. denied, 419 U.S. 1070 (1974); see 43 Geo. Wash. L. Rev. 635 (1975).
 11. Carnation Co. v. Pacific Westbound Conf., 383 U.S. 213, 216 (1966).
 12. States Marine Lines, Inc. v. FMC, 376 F. 2d 230 (D.C. Cir. 1967).
 13. Only four reasons for disapproval of an agreement are permitted under 46 U.S.C. § 815 (1970). Agreements will be disapproved which contain provisions which are (1) unjustly discriminatory; (2) detrimental to the commerce of the U.S.; (3) contrary to the public interest; (4) or violative of the Shipping Act of 1916.
 14. Agreements Nos. T-2108 and T-2108-A Between the City of Los Angeles and Japan Line Ltd., Kawasaki Kisen Kaisha, Ltd., Mitsui O.S.K. Lines, Ltd., & Yamashita-Shinnihon Steamship Co., 12 F.M.C. 110 (1968).
 15. Intermodal Service to Portland, FMC Docket 70-19, summarized in 41 ICC Prac. J. 485-86 (1974).
 16. 46 U.S.C. § 816 (1970).
 17. 46 U.S.C. § 817(b) (1)-(5) (1970).
 18. Ocean Rate Structures in the Trade Between United States North Atlantic Ports & Ports in the United Kingdom & Eire, 12 FMC 34 (1968), aff'd sub nom.

American Export - Isbrandtsen Lines v. FMC, 417 F. 2d 749 (D.C. Cir. 1969).

19. Pennsylvania v. FMC, 392 F. Supp. 795 (D.D.C. 1975). Since rejection could only be on technical grounds, and since "Agencies are exempted from compliance with NEPA when compliance would give rise to agency violation of statutory obligations", id. at 802, the court refused to order the FMC to reject the tariff.
20. Generally, overland rates are outbound ocean rates, while OCP rates are inbound ocean rates, although there is no substantial difference in their nature or purpose and the distinction is not always observed. Investigation of Overland & OCP Rates & Absorbptions, 12 F.M.C. 184, 188 (1969).
21. Id., aff'd sub nom. Port of New York Auth. v. FMC, 429 F. 2d 663 (5th Cir. 1970), cert. den., 401 U.S. 909 (1971).
22. Filing of Through Rates & Through Routes, 1969 A.M.C. [American Maritime Cases] 1306 (1970); 46 C.F.R. § 536.16 (1975).

JOINT RATES:

FOOTNOTES

1. In the Matter of Tariffs Containing Joint Rates & Through Routes for the Transportation of Property Between Points in the United States & Points in Foreign Countries, Ex Parte 261 [hereinafter International Joint Rates & Through Routes], 341 I.C.C. 246 (1972) (dissent).
2. 337 ICC 625 (1970).
3. 35 F.R. 16722, October 28, 1970, cited in International Joint Rates & Through Routes, 341 ICC 246, 250 n.5 (1972).
4. International Joint Rates & Through Routes, 341 ICC 246 (1970).
5. Id., at 254 n.11.
6. Cited in the first International decision, 337 ICC 625 (1970) as H.R. 14489, 91st Cong. 1st Sess. (1969). Also indexed by the Congressional Record as the Trade Simplification Act of 1969 and probably identical is S. 3142 which is printed with a section-by-section analysis at 115 Cong. Rec. 34241-44.
7. Key provisions of the earlier regulations were that the tariff could be filed by any common carrier, whether regulated by the ICC or not, or by a conference of ocean carriers, but not by freight forwarders or non-vessel-owning common carriers. The tariff was required to show the participating carriers and the division due the ICC carrier. The tariff could cover transportation from any U.S. point to any foreign point.
8. Pittsburgh Plate Glass Co. v. Pittsburg, C., C. & St. L. Ry. Co., 13 ICC 87, 100 (1908):
[T]he transportation of import traffic from the port of entry to an interior destination in completion of a through movement from a point in a foreign country is not a like service to that involved in the transportation of domestic traffic originating at such port, even where the transportation in all other respects is performed under like conditions.

9. Id; Texas & P. Ry Co. v. ICC, 162 U.S. 197 (1896); National Gypsum Co. v. United States, 353 F.Supp. 941, 947-48 (W.D. N.Y. 1973):

In Texas & Pac. Railway ... the Texas & Pacific published a lower rate for transportation from New Orleans to California of traffic imported from Europe than for carriage of identical domestic traffic between the same points. The lower rate was justified as necessary to avoid the loss of the European traffic altogether to competition which would transport it to the California coast by water. [The Supreme Court upheld the discrimination as justified. Ed.]

The viability of the principle established by Texas & Pac. Railway has repeatedly been confirmed. [numerous citations omitted.]

10. Pittsburgh Plate Glass Co. v. Pittsburgh, C, C & St. L. Ry. Co., 13 ICC 87 (1908).
11. See Canaveral Port Auth. v. The Ahnapee & W. Ry. Co., 337 ICC 671 (1970).
12. See Application of Domestic versus Import or Export Rates, 339 ICC 9 (1970).
13. 49 U.S.C. § 6(12 (1970). There is no comparable provision distributing imports equally where more than one railroad serve a port.

OIL PIPELINES :

FOOTNOTES

1. 49 U.S.C. § 1(1) (b) (1970).
2. The Pipe Line Cases, 234 U.S. 548 (1914).
3. Id.
4. Champlin Refining Co. v. United States, 329 U.S. 29 (1946).
5. United States v. Champlin Refining Co., 341 U.S. 290, 298 (1951).
6. Uniform System of Accounts for Pipeline Companies, 337 ICC 518, 523 (1970), rev'g 335 ICC 459.
7. 49 U.S.C. § 5(2) (1970).
8. 49 U.S.C. § 5(13) (1970).
9. 49 U.S.C. § 5(14) (1970).
10. 49 U.S.C. § 5(16) (1970).
11. Reduced Pipe Line Rates & Gathering Changes, 272 ICC 375, 382-83 (1948) aff'g 243 ICC 115 (1940).
12. Pipeline Demurrage & Minimum Shipment Rules on Propane, 315 ICC 443 (1962). The railroads protested as follows:

"The inherent advantage of pipeline operation is the transportation of liquids in large volume. This advantage is lost when shipments are received for transportation in small quantities. ... Dissipation by Mid-America [a carrier by pipeline] of its inherent advantage in the handling of volume quantities unfairly exposes the railroads to loss of competitive traffic which they are best equipped to handle."

Brief for Southwestern and Western Truck Line Rail Carriers at 43 in the proceeding cited above, quoted in Goodman, Recent Trends in Transport Rate Regulation, 70 Mich. L. Rev. 1223, 1271 (1970).

The ICC replied indirectly to this argument. A tariff rule established by one mode of transportation otherwise lawful and peculiarly adapted to

its operating methods, may not be condemned simply because it might result in some competitive disadvantage to another mode of carriage.

Pipeline Demurrage & Minimum Shipment Rules on Propane, 315 ICC 443, 448 (1962)

13. The negotiations leading up to the consent decree, apparently finally adopted in haste two weeks after Pearl Harbor, are described in A. Johnson, Petroleum Pipelines & Public Policy, 1906-1959, at 286-304 (1967) [hereinafter cited as Johnson].
14. Id. at 421-439.
15. Larson v. Chase Pipe Line Co., 183 Col. 76, 514 P.2d 1316 (1973); Collins Pipeline Co. v. New Orleans East, Inc., 250 So.2d 29 (La.Ct. App. 1971).
16. 30 U.S.C. § 185 (1970).
17. 30 U.S.C. § 185 (1970); Denver Pet. Corp. v. Shell Oil Co., 306 F. Supp. 289, 302 (D. Colo. 1969) ("As we read the statute, the common carrier obligation is absolute").
18. 43 U.S.C. § 1334(c) (1970).
19. Johnson at 474.

GAS PIPELINES:

FOOTNOTES

1. 15 U.S.C. § § 717-717w (1970).
2. 15 U.S.C. § 717(b) (1970).
3. C. Phillips, The Economics of Regulation: Theory & Practice in the Transportation & Public Utilities Industries, 596 (rev. ed. 1969) [hereinafter cited Phillips, Regulation].
4. Phillips Pet. Co. v. Wisconsin, 347 U.S. 672 (1954).
5. FPC v. Transcontinental Gas Pipe Line Corp., 365 U.S. 1 (1961). At the time of this case (see notes 14, 16 infra), the FPC had no authority over the price of an interstate sale of gas direct to an industrial user and not for resale. The FPC did have authority to decide whether to authorize construction of a pipeline. The issue was whether the FPC could properly consider the proposed price and the proposed end use of gas in a sale outside its regulatory jurisdiction when determining whether the public interest would be served by authorizing the pipeline. The Supreme Court held such considerations proper.
6. United Gas Imp. Co. v. Continental Oil Co., 381 U.S. 392 (1965).
7. FPC v. Louisiana Power & Light Co., 406 U.S. 621 (1972). Companies facing a shortage of gas must file their curtailment plan with the FPC. 18 C.F.R. § 2.70 (1976).
8. 61 Geo.L.J. 833, 837, 842 (1973).
9. 15 U.S.C. § 717a(5) (1970).
10. Re El Paso Natural Gas Co., 50 F.P.C. 651 (1973) (appeal pending); cf Mobil Oil Corp. v. FPC, 483 F. 2d 1238 (D.C. Cir. 1973) (FPC may not set rates for transporting liquid hydrocarbons with natural gas, but may assure that costs of transporting such liquids are not borne by natural gas transportation).
11. 15 U.S.C. § 717f(c) (1970).
12. 15 U.S.C. § 717f(e) (1970). See Pittsburgh v. FPC, 237 F.2d 741 (D.C. Cir. 1956) (present and future requirements must be considered).

13. Illinois Natural Gas Co. v. Central Ill. Pub. Serv. Co., 314 U.S. 498, 509 n.2 (1942).
14. FPC v. Transcontinental Gas Pipe Line Corp., 365 U.S. 1 (1961) (use as boiler fuel to produce steam).
15. Public Serv. Comm'n of N.Y. v. FPC, 463 F.2d 824 (D.C. Cir. 1972).
16. FPC v. Transcontinental Gas Pipe Line Corp. 365 U.S. 1 (1961). The FPC also properly considered the effect of an unregulated sale on the ability of the pipeline to serve the regulated market.
17. Consumer Fed'n of America v. FPC, 515 F.2d 347 (D.C. cir 1975), cert. denied, 44 U.S.L.W. 3229 (Oct. 14, 1975).
18. Atlantic Ref. Co. v. Pub. Serv. Comm'n of N.Y., 360 U.S. 378 (1959).
19. See Consumer Fed'n of America v. FPC, 515 F.2d 347 (D.C. Cir 1975).
20. United Gas Imp. Co. v. FPC, 290 F.2d 147 (5th Cir. 1961), cert. denied, 366 U.S. 965.
21. Atlantic Seaboard Corp. v. FPC, 397 F.2d 753 (4th Cir. 1968).
22. Id. Two or more suppliers operate in the metropolitan areas of Atlanta, Chicago, Cleveland, Detroit, Los Angeles, New York, Philadelphia, Pittsburgh, and San Francisco. Id. at 758 n.8.
23. 15 U.S.C. § 717f(g) (1970).
24. California v. FPC, 369 U.S. 482 (1962). See infra text at note 46.
25. Public Serv. Comm'n of N.Y. v. FPC, 463 F.2d 824 (D.C. Cir. 1972).
26. 18 C.F.R. § 2.82 (1976).
27. 42 U.S.C. § 4331 et seq. (1970).
28. American Smelting & Ref. Co. v. FPC, 494 F.2d 925 (D.C. Cir. 1974).

29. Re El Paso Natural Gas Co., 50 F.P.C. 1264 (1973).
30. Re Transcontinental Gas Pipe Line Corp., 38 F.P.C. 906 (1967).
31. 15 U.S.C. § 717f(e) (1970).
32. Atlantic Ref. Co. v. Pub. Serv. Comm'n of N.Y., 360 U.S. 278 (1959).
33. 15 U.S.C. § 717f(b) (1970).
34. Transcontinental Gas Pipe Line Corp. v. FPC, 488 F.2d 1325, 1328 (D.C. Cir. 1973).
35. Id., quoting Michigan Consol. Gas Co. v. FPC, 283 F.2d 204, 214 (D.C. Cir. 1960).
36. FPC v. Moss, 44 U.S.L.W. 4278 (Mar. 3, 1976).
37. Pittsburgh v. FPC, 237 F.2d 741 (D.C. Cir. 1956). This seems to strain the FPC's jurisdiction somewhat. However, these comments may only amplify the court's mandate to the FPC to consider whether abandonment now would require more expansion later and hence, higher rates. See also, note 12 supra.
38. Transcontinental Gas Pipeline v. FPC, 488 F.2d 1325 (D.C. Cir. 1973). This was a case of producers desiring to abandon deliveries to pipelines.
39. 15 U.S.C. § 717f(c) (1970).
40. Consumer Fed'n of America v. FPC, 515 F.2d 347, 355-56 (D.C. Cir. 1975), cert. denied, 44 U.S.L.W. 3229 (Oct. 14, 1975).
41. 15 U.S.C. § 717f(c) (1970).
42. The history of the case, which led finally to an approved order for El Paso to divest itself of Pacific after litigation lasting fifteen years, is briefly recounted in United States v. El Paso Natural Gas, 358 F. Supp. 820 (D. Colo. 1972), aff'd mem., 410 U.S. 962 (1972).
43. The Government alleged the stock acquisition violated § 7 of the Clayton Act, 15 U.S.C. § 18 (1970).

44. These [the applications] took the form of an application by Pacific under Section 7(b) of the Act for permission to abandon facilities and services and an application by El Paso under Section 7(c) for a certificate approving acquisition of Pacific's facilities.
California v. FPC, 296 F.2d 348, 350 n.3 (D.C. Cir. 1961), rev'd, 369 U.S. 482 (1962).
45. See California v. FPC, 369 U.S. 482, 484-85, 489 (1962).
46. Id. at 485-86; 49 U.S.C. § 5(11) (1970).
47. Northern Natural Gas Co. v. FPC, 399 F.2d 953 (D.C. Cir. 1968). Where three companies had first filed mutually exclusive applications for a certificate and then set up a joint venture to apply for a certificate, the case was remanded to the FPC for failure to make any findings on the anti-trust implications.
48. 15 U.S.C. § 717f(h) (1970).
49. Robinson v. Transcontinental Gas Pipe Line Corp, 306 F. Supp. 201 (N.D. Ga. 1969), aff'd, 421 F.2d 1397 (5th Cir. 1970) (per curiam), cert. denied, 398 U.S. 905.
50. 30 U.S.C. §§ 181, 185 (1970).
51. Leases are granted by the Secretary of the Interior under 43 U.S.C. §§1331-43; rights-of-way under 43 U.S.C. § 1334(c) (1970).
52. Public Serv. Comm'n of N.Y. v. FPC, 463 F.2d 824 (D.C. Cir. 1972).
53. See Phillips, Regulation, supra note 3, at 604-15 concerning independent producers. See RP 66-24, Pipeline Production Area Rate Proceeding (Phase I), 42 F.P.C. 738, reh. denied, 42 F.P.C. 1089 (1969), aff'd sub nom. City of Chicago, Ill. v. F.P.C., 458 F.2d 731 (D.C. Cir. 1971), cert. denied, 405 U.S. 1074 (1972) (concerning gas produced by pipeline companies).

54. El Paso Merger Legislation, Hearing Before the Subcommittee on Communications & Power of the House Committee on Interstate & Foreign Commerce on H. R. 10331, 92d Cong., 2d Sess., at 3 (1972) (statement of Hon. Brock Adams).

RECENT LEGISLATION & LEGISLATIVE PROPOSALS

FOOTNOTES

1. Act of Feb. 5, 1976, Pub. L. No. 94-210, 90 Stat. 31. Some key provisions are also summarized in 1976 Congressional Quarterly (Weekly Reports) at 19.
2. Id. § 205, 49 U.S.C.A. § 15a(3) & (4) (June 1976 Supplement).
3. These concerns were voiced by John A. Creedy, Pres., Water Transport Assoc., in Hearings on H.R. 6351 & H.R. 7681 Before the Subcommittee on Transportation & Commerce of the House Committee on Interstate & Foreign Commerce, 94th Cong., 1st Sess., at 648 (1975) (Ser. 94-38) [hereinafter cited as Railroad Revitalization - 1975].
4. Id.
5. H.R. 11207, 92d Cong.
6. Statement of John A. Creedy in Hearing on H.R. 11824 11826, & 11207 Before the Subcommittee on Transportation & Aeronautics of the House Committee on Interstate & Foreign Commerce, 92d Cong., 2d Sess., Vol. 1, 429, 433 (1972) (Ser. 92-76-77-78-79); [hereinafter cited as Transportation Act of 1972 - Hearings]. H.R. 11207, Title III, § 302, id. at 72, would have subjected bulk carriers to provisions of §§ 304, 306, 313, 316, and 317 of the Interstate Commerce Act.
7. S.671, 94th Cong., 1st Sess. Introduced Feb. 11, 1975; referred to Government Operations Committee. CCH Congressional Index, 94th Cong.
8. S.2422, 94th Cong., 1st Sess. Introduced Sept. 26, 1975; referred to Commerce Committee. CCH Cong. Index, 94th Cong.
9. H.R. 8193, 93d Cong.
10. 30 Congressional Quarterly Almanac 823 (1974).
11. 1976 Cong. Qtly (Weekly Report) 1965-68. Unless otherwise indicated, this is the source of statements in the text.

12. The pipeline, running 1,302 miles from Wyoming to Arkansas , was originally proposed by a partnership of Bechtel Corp. and Burlington Northern Inc. When Burlington pulled out, Bechtel formed Energy Transportation Systems Inc. with two other companies. Id.
13. S. 3879, 93d Cong.
14. Presumably, H.R. 1863, 94th Cong., 1st Sess. Introduced Jan. 23, 1975.
15. H.R. 14385, 94th Cong., 2d Sess. Introduced June 15, 1976.
- 15.5 A good, brief background may be found at 30 Congressional Quarterly Almanac 800 (1974).
16. S. 2310, 94th Cong., 1st Sess.
17. S. 692, 94th Cong. 1st Sess. (1975).
18. 31 Congressional Quarterly Almanac 254 (1975).
19. 1976 Cong. Qtly (Weekly Report) 259, 313. The bill was H.R. 9464, 94 Cong. 2d Sess., a compromise drafted to avoid comprehensive deregulation.
20. S. 3422, 94th Cong. 2d Sess. The discussion in the text is based on 1976 Cong. Qtly. (Weekly Report) 1322-23, and 1467.
21. New York Times, July 28, 1976, at 1, Col. 4 and 42, Col. 2 (City ed.)
22. 43 ICC Prac. J. 385-86 (1976) discussing Bulk Grain in Barge Loads, Middlewest, South, and Southwest, 351 ICC 422 (1976).
23. 43 ICC Prac. J. 146 (1975).
24. 43 ICC Prac. J. 256 (1976) discussing Mainstream Shipyards & Supply, Inc., Exemption Application.

REQUEST FOR FEEDBACK TO The DOT Program Of University Research

DOT-TST-77-79

- | YES | NO | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Did you find the report useful for your particular needs?
If so, how? |
| <input type="checkbox"/> | <input type="checkbox"/> | Did you find the research to be of high quality? |
| <input type="checkbox"/> | <input type="checkbox"/> | Were the results of the research communicated effectively
by this report? |
| <input type="checkbox"/> | <input type="checkbox"/> | Do you think this report will be valuable to workers in the
field of transportation represented by the subject area of
the research? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there one or more areas of the report which need
strengthening? Which areas? |
| <input type="checkbox"/> | <input type="checkbox"/> | Would you be interested in receiving further reports in this
area of research? If so, fill out form on other side. |

Please furnish in the space below any comments you may have concerning the report. We are particularly interested in further elaboration of the above questions.

COMMENTS

Thank you for your cooperation. No postage necessary if mailed in the U.S.A.

RESEARCH FEEDBACK

Your comments, please . . .

This booklet was published by the DOT Program of University Research and is intended to serve as a reference source for transportation analysts, planners, and operators. Your comments on the other side of this form will be reviewed by the persons responsible for writing and publishing this material. Feedback is extremely important in improving the quality of research results, the transfer of research information, and the communication link between the researcher and the user.

Fold

Fold

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE SECRETARY

Washington, D.C. 20590

Official Business

PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
DEPARTMENT OF
TRANSPORTATION

DOT 518



Office of University Research
Office of the Secretary (TST-60)
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

Fold

Fold

IF YOU WISH TO BE ADDED TO THE MAIL LIST FOR FUTURE
REPORTS, PLEASE FILL OUT THIS FORM.

Name _____ Title _____
Use Block Letters or Type

Department/Office/Room _____

Organization _____

Street Address _____

City _____ State _____ Zip _____