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Legal Education on the Move—Law & Transportation at the University of Denver

PAUL STEPHEN DEMPSEY*

I. INTRODUCTION

Nineteen Eighty Seven is a year of transportation anniversaries. It will mark the centennial celebration of establishment of economic regulation over a major American industry and the creation of the nation’s first independent regulatory commission—the Interstate Commerce Commission [ICC]. It is the 50th birthday of the nation’s largest bar association devoted to transportation—the Transportation Lawyers Association [TLA]. It is the 20th anniversary of the TLA-University of Denver co-sponsorship of the premiere continuing legal education program for transportation attorneys and practitioners—the Transportation Law Institute [TLI]. And it marks the publication of the fifteenth volume of the most successful and comprehensive legal periodical in this field — the Transportation Law Journal [TLJ]. Hence, this seems a particularly appropriate moment to reflect on the past and pontificate on the future of legal education in transportation.

The Transportation Law Program at the University of Denver [D.U.]

College of Law began in 1967 as a continuing legal education program for attorneys and practitioners—the Transportation Law Institute. Since its inception, the Institute has been jointly sponsored by the University of Denver and the Transportation Lawyers Association (TLA was formerly the Motor Carrier Lawyers Association). Ours has been a rich and rewarding relationship over the ensuing years which has matured into one of mutual admiration and common benefit in law and education.

A decade ago, D.U.'s Transportation Law Program began to blossom with the injection of a series of annual economic contributions by TLA. This made possible the creation of a new faculty position devoted to the discipline of Transportation Law. The incumbent in that chair also serves as Faculty Editor of the Transportation Law Journal. In 1976, D.U. also assumed responsibility for publication of that periodical, which it shares with TLA's Transportation Law Journal Board of Governors. With the current issue, the Transportation Law Journal publishes its fifteenth volume—a decade-and-a-half of leading scholarship in this important and dynamic field. Let us examine where we have been, and where we appear to be going.

II. METAMORPHOSIS IN TRANSPORTATION LAW

Transportation is the foundation infrastructure industry upon which the rest of commerce is built. It therefore serves as among the most important industries in any nation's economy. In 1887, it became the first industry to be regulated. And by the mid-1970s, it became the first to enjoy comprehensive regulatory reform.

Few areas of federal law have changed as rapidly and fundamentally as has transportation in the contemporary era. During the past decade, Congress has promulgated comprehensive regulatory reform legislation for each mode of transportation. These bills include:

- The Railroad Revitalization and Regulatory Reform Act of 1976
- The Air Cargo Deregulation Act of 1977
- The Airline Deregulation Act of 1978
- The International Transportation Air Competition Act of 1979
- The Motor Carrier Act of 1980
- The Staggers Rail Act of 1980
- The Household Goods Transportation Act of 1980
- The Bus Regulatory Reform Act of 1982
- The Shipping Act of 1984
- The Civil Aeronautics Board Sunset Act of 1984

Without a question, the regulatory and legislative developments of the past decade have been extraordinary. They have struck at the very core of the industry and its relationship with government. Transportation may well be the most dynamic area in all of administrative law.
During this period, the Civil Aeronautics Board was “sunset,” while its remaining responsibilities over the airline industry were transferred to the U.S. Department of Transportation. The Interstate Commerce Commission, the nation’s first independent regulatory agency, with comprehensive jurisdiction over rail and motor carriers, will soon turn 100. But it has been saddled with appointees committed to its destruction — the three marketeers appointed by President Carter (i.e., Commissioners Alexis, Gaskins and Trantum) and the three marketeers appointed by President Reagan (i.e., Commissioners Andre, Gradison, and Sterrett). That Grand Old Lady at 12th & Constitution Avenue in Washington, D.C., has some difficult years ahead of her, as she enters her second century. Some physicians prescribe euthanasia for what they perceive to be a senile old woman. Others hope that she will catch her second wind and enter her second century with the strength of a hurricane.

The law has evolved rapidly and radically during this era, and economic regulation has been significantly constricted. This has, of course, enhanced the need for education in this field so as to understand the changes upon us. And reform has had a concomitant effect on law students. The competitive advantage of decades of regulatory experience is not as valuable as it once was. Our graduating law students begin the practice of transportation law on a nearly clean slate.

III. THE CURRICULUM

The heart of any educational program is its curriculum. The University of Denver College of Law offers its students the opportunity to focus their education in one of several areas of specialization, including advocacy skills, business planning, international law, natural resources, tax and transportation. All J.D. candidates are required first to fulfill the educational obligations of the Required Curriculum, which consumes more than half of a student’s legal education at our law school. Included within the Required Curriculum are courses which serve as a foundation for that which follows, including the electives they may take in the various fields of government regulation. Among these is Administrative Law, a required course which offers a comprehensive overview of the practice and procedure of government agencies, with a particular emphasis on the ins and outs of the Administrative Procedure Act. Also of manifest importance is the required course of Constitutional Law.

The University of Denver offers a comprehensive academic program in Transportation Law with a wide spectrum of introductory and advanced courses and seminars, as well as independent study and internship opportunities. These attempt to provide educational exposure to the legal, regulatory, economic and political developments in transportation.
The curriculum of the Transportation Law Program begins with the basic course in Transportation Law. This course offers the student an overview of all aspects of economic regulation (i.e., entry, exit, rates and business practices) of each of the several domestic transport modes (i.e., air, motor, rail and water carriers, freight forwarders and brokers). It also provides students with a survey of liability issues surrounding loss and damage to freight in transit, labor law issues in transportation, and the government's role in providing transport services (e.g., Amtrak, Conrail and urban mass transit).

Beyond the basic course in Transportation Law, students are free to take electives in Admiralty, Antitrust, Aviation Law, Public Utilities Law, Space Law and Regulated Industries, as well as seminars in International Transportation Law. It is anticipated that a course in Law & Economics will be added to the curriculum during the forthcoming academic year.

Courses in Space Law and Regulated Industries have only recently been added to the D.U. curriculum. The adoption of the former reflects the fact that transportation is on the cutting edge of technology and provides an important role in facilitating global communications. As the resources of space are commercially developed, transportation will continue to play an essential role.

Regulated Industries is a course which offers the student a comprehensive overview of the major American industries in which state and federal governments have played a regulatory role—electric utilities (hydroelectric, coal-fired and nuclear), oil and gas, broadcast communications (radio, TV and cable), telecommunications, and transportation (air, rail and motor). It first attempts to introduce students to the common threads of economic regulation running through all of these industries. Upon this foundation, the substantive law of each is explored.

Students in the Transportation Law Program have the opportunity to participate in externships in federal regulatory agencies or major transportation businesses. For example, one D.U. law student recently spent an academic quarter performing legal work at the Federal Aviation Administration of the U.S. Department of Transportation in Washington, D.C. The University of Denver recognizes the educational value of this "hands-on" experience, and extends academic credit for it.

Students at the University of Denver also have the opportunity to develop their legal research and writing skills by participating as members of the Staff and Editorial Board of the nation's leading periodical in its field—the Transportation Law Journal. Ordinarily, students join the TLJ during their second year of law school. They perform one academic quarter as a candidate, during which they are given an examination which tests their familiarity with the "blue book" system of law review citation. They are also given a series of traditional law journal staff assignments,
including “spading and critiquing” a manuscript submitted for publication; and “citing and sourcing” or “blue booking” footnotes. Upon successful completion of these tasks, at the end of the candidacy quarter, the student is elected to Staff.

Staff members are eligible to earn academic credit for their work on the Journal. They are expected to contribute 30 hours of work for each hour of academic credit earned. During their final year of law studies at the University of Denver, students may elect to serve as an Editor on the periodical. They must first submit a piece of scholarly research of publishable quality to the Faculty Editor of the Journal. If it is approved, the existing editors decide who shall be elected to fill vacancies on the Editorial Board. Editors are eligible to receive up to three hours of academic credit per quarter. Again, students are expected to put in 30 hours of work for each hour of academic credit earned. An overall ceiling of 15 hours of credit is imposed on Journal activities.

The D.U. law students who serve as editors and staff members of the TLJ review and edit a wide range of scholarly literary products submitted by attorneys, economists and government officials. They also have an opportunity to publish their own literary contributions as Notes, Comments, or Recent Decisions. The Journal works closely with all student authors in an effort to develop legal research and writing skills. Since the legal profession is, predominantly, a literary profession, the development of such skills is absolutely essential to the successful practice of law.

IV. THE TRANSPORTATION LAW JOURNAL

The Transportation Law Journal is the only comprehensive law school publication in the area of transportation law. It is a major source of information for the practicing bar as well as for scholars. As such, it strives to provide its national readership with the highest caliber of writing.

The substantive focus which defines the Journal's scope is diverse and includes all areas of transportation law. The following is a partial list of topics which have been dealt with in the past: land-use planning, environmental law, labor law, commercial law, corporate law, civil rights, antitrust and trade regulation, air, motor and rail carrier regulation, airport noise regulation, highway planning, auto emissions, the SST controversy, coal slurry pipelines, shipping and deepwater ports, the transportation of hazardous materials, and environmental regulation.

Over the years, the TLJ has been a lively forum for the debate over contemporary legal, political and economic issues confronting the industry. Major symposium issues have addressed the following topics:

- International and Intermodal Transportation—Vol. 12(1)
- Urban Mass Transportation—Vol. 12(2)
- Transportation Regulation: Past, Present and Future—Vol. 13(1)
Transportation Deregulation—Vol. 13(2)
Intrastate Regulation—Vol. 14(2)

The Journal is planning a symposium dedicated to the Centennial Anniversary of the Interstate Commerce Commission for volume 16, entitled “The Interstate Commerce Commission: The First Hundred Years of Economic Regulation.”

Beyond these significant symposiums, the Journal has served as a soap box from which individuals have debated the virtues and sins of regulation and deregulation. On two occasions, vigorous debates on the wisdom of motor carrier ratemaking antitrust immunity were conducted between Washington transportation consultant Jesse J. Friedman and AEI Resident Scholar James C. Miller III, in volumes 10(1) and 11(2) of the Journal. Mr. Miller went on to become President Reagan’s FTC Chairman, and David Stockman’s successor as Director of the Office of Management and Budget. And one will recall the infamous debate between Professors Dempsey and Hardaway in Volumes 13(2) and 14(1) of the TLJ—the one in which Hardaway got it all wrong and Dempsey got it all right.

The Transportation Law Journal has become a significant means of disseminating information, an invaluable research tool for transportation lawyers and practitioners, and an important forum for the public policy debate over regulation and deregulation. It has an international audience of subscribers around the world — from Canada to Yugoslavia, from Norway to Australia, from New Guinea to Japan, and from Tanzania to Thailand. Today, more than 1,000 individuals, law firms, government agencies, and libraries subscribe to the TLJ. All members of the Transportation Lawyers Association receive the periodical as one of the perquisites of their membership. Of the legal periodicals published by the University of Denver, the Transportation Law Journal is the only one reproduced in the Westlaw computer system.

V. PRIZES, AWARDS AND SCHOLARSHIPS

In an effort to encourage interest in U.S. and Canadian law schools in the field of Transportation Law, the Film, Air and Package Carriers Conference of the American Trucking Associations established a $1,000 Transportation Law Essay Award Contest in memory of Harold Shertz of Philadelphia, for his many years of distinguished service to the transportation industry and the legal profession. Students of any Canadian or U.S. law school are eligible to participate. Winning entries are designated by the Transportation Lawyers Association TLJ Board of Governors and are published in the Transportation Law Journal.

Two scholarships established by the Motor Carrier Lawyers Foundation are available to students in the Transportation Law Program at the
University of Denver. One is named in honor of Marion F. Jones of Denver for his many years of distinguished practice in the legal profession. The second is named in honor of the Transportation Lawyers Association. Both are awarded on the basis of high academic standing, economic need, and participation in the activities of the Transportation Law Program, particularly the Transportation Law Journal.

VI. THE TRANSPORTATION LAW INSTITUTE

The concept of a continuing legal education program for attorneys specializing in transportation originated with members of the TLA. They initially envisioned an intensive educational experience for attorneys and practitioners in the field of motor carrier economic regulation by the Interstate Commerce Commission. The University of Denver, as an entity with broad experience in continuing legal education, was approached as a potential cosponsor. This union has since produced a plethora of excellent educational programs.

Prior to 1980, the subject matter emphasis of the Transportation Law Institute rotated on an annual basis, usually devoting an entire program to the issue of motor carrier entry, ratemaking, finance transactions or liability for loss and damage. With the challenges posed by deregulation in the contemporary era, the educational program was expended to include the emerging legal problems in the fields of bankruptcy, labor law, antitrust, environmental, and safety regulation, as well as intermodal and rail transportation issues.

The situs of the Transportation Law Institute has heretofore been in Denver or the summer Rocky Mountain resorts of Colorado and Utah. With the merging of TLI and TLA annual educational programs, the Transportation Law Institute will henceforth be held at locations throughout the United States. The 20th Annual Transportation Law Institute will be held in Scottsdale, Arizona, on April 22-25, 1987. For the first time, its continuing legal educational functions will be combined with those of the annual meeting of the Transportation Lawyers Association.

VII. THE PROGNOSIS FOR LEGAL EDUCATION IN TRANSPORTATION LAW

In the short run, educational activities in transportation must continue to broaden and diversify the exposure of students toward emerging legal issues in the field. As motor carrier operating authority regulation by the ICC constricts, the focus must be toward increased exposure to emerging ICC ratemaking and antitrust regulatory issues, the role of other regulatory agencies in areas such as safety and environmental law, the role of the judiciary in enforcing and administering antitrust and bankruptcy law, and toward a more widely diversified interest in intermodal and international
transportation, as well as the full spectrum of transport modes — air, rail, motor, pipeline and water, brokers and freight forwarders. Similarly, the role of the U.S. Department of Transportation in such areas as safety and hazardous materials transport regulation, highway construction, and urban mass transit facilitation must be given more attention.

In the long run, the education learned in transportation may be useful in practicing law in the other regulated industries. For example, basic ratemaking principles are remarkably similar for motor, rail and pipeline carriers, electric utilities and telecommunications companies. The Public Utilities Commissions of most states have regulatory jurisdiction over them all. Entry regulation has common threads running throughout transportation and broadcast communications. This is true, because transportation was the first industry to be comprehensively regulated. Subsequent federal and state efforts to engage in economic regulation rested upon the foundations of the Interstate Commerce Act and judicial interpretations thereof. Ultimately, we may see the emergence of regulated industries attorneys competent to perform all these legal functions on behalf of a variety of clients requiring comprehensive regulatory expertise.

Recently, our law school has moved into the new 140,000 square-foot Lowell Thomas Law Center on a 33-acre campus near Stapleton International Airport. Denver is among the nation’s major transportation hubs for air, motor and rail carriers. It is therefore an ideal location for a program which focuses on transportation law. It is hoped that the University of Denver will continue to make the educational contribution to this rapidly evolving, dynamic field that it richly deserves.
Issues of Cost Recovery in the Debate Over Competitive Access

CHARLES N. MARSHALL*
CHERYL A. COOK*

I. INTRODUCTION

Competitive access is a term that has come to be applied to the availability of facilities owned by one railroad for services provided by or in conjunction with another railroad. A debate has arisen over the terms and circumstances of access, with the proponents of access generally seeking the installation of intramodal rail competition.¹

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² Ms. Cook is an Associate General Attorney for Consolidated Rail Corporation. She obtained her J.D. from Villanova University School of Law in 1981 and graduated Summa Cum Laude from Pennsylvania State University with her B.A. in 1978. She served as Law Clerk for Honorable Leonard Sugarman, Court of Common Pleas, West Chester, Pennsylvania from 1981 to 1982.

Cary A. Metz, Associate General Attorney, Consolidated Rail Corporation, provided essential assistance in the preparation of this article.

1. The debate arises against the backdrop of increasing intermodal competition, competition which seriously weakened the rail industry and led to the deregulatory measures of the Staggers Rail Act of 1980 ("Staggers Act"). Pub. L. No. 96-448. A purpose of this law was to enhance rail-truck competition. H.R. Rep. No. 1430, 96th Cong., 2d Sess. 79, 80 (1980) (Reprinted in 1980 U.S. Code Cong. & Ad. News 4110-4111). Whether access by one railroad to the facilities of another can or should be compelled in the presence of truck competition is a question beyond the scope of this article, but a serious question nonetheless.
The access issue is, in part, a stepchild of deregulation, which provided railroads with an expanded ability to dislodge themselves from the involuntary and uneconomic system of equalized joint rates, prescribed divisions, and below-cost switching charges.\textsuperscript{2} For the first time, carriers could price their services in accordance with cost and market demand.\textsuperscript{3} The framers of the legislation hoped through deregulation to encourage more efficient routing, more profitable traffic for railroads and lower total costs to shippers.\textsuperscript{4}

Deregulation was bound to and did result in the dislocation of railroads that were disadvantaged by their location, route structure, cost structure, or marketing abilities.\textsuperscript{5} Such companies now find themselves uncompetitive in markets which they once were able to serve profitably only as a result of agency-enforced practices of holding down switching charges and equalizing all rates between any two points at a level that protected the least efficient carrier.\textsuperscript{6}

These carriers have sought, in the name of "competitive access," to recapture traffic by forcing efficient carriers to subsidize their participation


\textsuperscript{4} "Two of the major problems caused by the existing joint rate system are too low rate divisions and a proliferation of uneconomic routes. . . . The Conferences intend that the [Act] will alleviate these problems . . . by assuring that a carrier . . . will be able . . . to either earn revenues . . . equal to or exceeding 110 percent of . . . variable costs or to close routes not providing this level of earnings. . . ."


\textsuperscript{5} In Western Railroads—Agreement, 364 I.C.C. 635, 649-50 (1981), the Interstate Commerce Commission indicated that some dislocation was the expected result of achieving a more competitive rail industry:

To the extent that our definition of practicably participate will result in the loss of some routes and a consequent reduction in the number of routing options available to shippers, that effect is outweighed by the desirability of more efficient routing . . . . We acknowledge the possibility that certain carriers may lose some business which they now enjoy under open routings as bridge carriers. This outcome is, however, contemplated by the SRA's general thrust in favor of efficiency in carrier operations.

\textsuperscript{6} See generally, T. KEELER, RAILROADS, FREIGHT, AND PUBLIC POLICY Ch. 2 (1983).
in inefficient routes. Likewise, many shippers who enjoyed regulated rates upon certain routes at less than full economic costs are seeking the same thing.

These efforts prevent competitive access and produce anticompetitive results. Correctly designed and rationally applied, competitive access achieves the opposite result: it concentrates traffic over the most efficient route and allows carriers and shippers alike to share in the benefits of that efficiency.

In this context, access can arise in a variety of forms: inter-carrier rate agreements, proportional rates, switching, or operating rights that allow multiple carriers (or shippers) to operate over the same track.

This article discusses the economics of voluntary and involuntary access, particularly where joint use of a single set of tracks is at issue. In that connection, the article raises an issue that has been little debated: the potential that labor protection costs, whether imposed by the Interstate Commerce Commission or arising under collective bargaining agreements, could significantly distort the economics (and, therefore, the availability) of access.

II. THE COMPETITIVE ACCESS DEBATE SO FAR

A. THE ROLE OF THE INTERSTATE COMMERCE COMMISSION IN COMPETITIVE ACCESS

The initial forum for the competitive access debate was the Interstate Commerce Commission ("Commission"). Carriers first exercised the new freedom afforded by deregulation to enact surcharges and cancel joint rates, actions directed largely at freeing carriers from the provision of service that was palpably unprofitable. The Commission generally endorsed such practices as the means by which to bring greater efficiency to the routing and pricing structure of the industry. Consistent with Con-

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7. In Joint Line Cancellation on Soda Ash by Union Pacific, 365 I.C.C. 951, 970 (1982), the Commission, in response to the contention that equalized joint rates should be restored to promote competition, responded that such restoration would not lead to "real competition," and termed competition under the former system, "artificially induced and unrelated to transportation costs."

8. The term "labor protection" is used to refer to payments required by either statute or contract to be made to displaced or dismissed railroad employees.


11. See supra, notes 4 and 5; see also, e.g., Docket No. 39176 (Sub-No. 1) Pittsburgh & Lake Erie R.R. v. Consolidation Rail Corp., (unprinted) April 3, 1985, affd Pittsburgh & Lake Erie
gressional intent that railroads achieve revenue adequacy, carriers also began to increase switching charges to cover the costs of providing such services.

Carriers whose inefficiency was protected by the equalized rate structure objected. Shippers who were subsidized by uneconomically low rates in the former structure also objected.

Initially, the Commission declined to interfere, finding that the railroads' actions were consistent with the Staggers Act mandate. In response to the continued outcry over the various forms of independent pricing undertaken by the railroads, the Commission later initiated a rulemaking to determine the standards that would govern the cancellation of through routes and joint rates and the prescription of through routes, through rates, and reciprocal switching. While compromises in the standards adopted by the Commission were unavoidable, the importance


16. In Standards for Intramodal Rail Competition, slip op. at 9, 11 (I.C.C. July 7, 1983), the Commission observed:

As a general proposition, the actions [i.e., widespread railroad rate restructuring] comport with the Staggers Act mandate. That is, rail carriers are no longer acting in concert, offering equal opportunities for all regardless of location, management efficiency or other variables, but instead are being operated as individual businesses, run to make the most of what each has to offer the shipping public.

* * *

To the extent that recent changes to the joint rate structure reflect inherent or developed advantages one carrier may have over another, such as a shorter or more efficient single line route, they are changes that the Staggers Act encourages, as they ultimately produce a more efficient and competitive industry.

The Commission acknowledged that in individual circumstances the actions taken by a railroad could have an anticompetitive impact, but the Commission concluded that such circumstances could properly be evaluated only on a case-by-case basis.

of the new rules is that they focused on preservation or enhancement of efficiency and competition,18 not the preservation or enhancement of particular competitors.19

As direct attacks failed against actions that were in effect reasonable rate increases, a new dimension crept into the debate. This dimension involved requests for physical use of one carrier’s track by another carrier or shipper. This was a new issue, not specifically addressed by the Commission’s decision in Standards for Intramodal Rail Competition.20

Carriers have long had the statutory ability to enter into voluntary trackage rights agreements21 and, on behalf of themselves or shippers, have been allowed to ask the Commission to compel access to the terminal facilities of another railroad.22 The Staggers Act extended the Commission’s authority to compel access by means of reciprocal switching as well.23 Only in recent history however, has there been widespread attention to the notion of physical access as a means to defeat rates whose levels meet the maximum rate reasonableness criteria.24

For these and other reasons, the Commission, to date, has struggled to determine the context in which the grant of access to terminals is appropriate.25 This uncertainty also is apparent in its treatment of requests

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20. The issue of what standards should govern the Commission’s grant of physical access to terminals under 49 U.S.C. § 11103(a) (1982) was raised by Railroads Against Monopoly and Chemical Manufacturers Association in Standards for Intramodal Rail Competition, slip op. (I.C.C. July 7, 1983), but was not embodied in the regulations adopted by the Commission.
24. The issue raised by such requests for access intended to defeat lawful rates is whether, and if so, when, a rate that meets the maximum rate reasonable criteria can nonetheless be anticompetitive. If this issue is resolved in the affirmative, it must be determined whether relief should come in the form of a lower rate or a grant of access. See infra, discussion at n.26.
25. In certain of the post-Staggers Act access cases brought under section 11103, the petitioner has sought reciprocal switching and terminal access either jointly or in the alternative. In Midtec Paper Corp. v. Chicago & N.W. Transp., No. 39021, (I.C.C. July 3, 1985), the Commission reversed a Review Board decision that Soo Line serve Midtec’s plant located on the CNW. The Commission rejected the argument that relief under sections 11103(a) and (c) was available concurrently and that reciprocal switching should be available on demand to shippers served solely by one carrier. The Commission stated that there must be evidence that service is inadequate to justify such relief. Moreover, it found that the compelled-access provisions of the Act were not to be used to remedy rates that the shipper believed to be too high, in the absence of a demonstration of market dominance. In its decision, the Commission overruled the holding of Delaware and Hudson Ry. v. Consolidated Rail Corp., 367 I.C.C. 718 (1983), that only intramodal rail competition could be considered in determining the need for competitive rail service under Section 11103(c)(1).

The Commission served its decision in Midtec prior to completion of the Standards for In-
for reciprocal switching.\textsuperscript{26} The Commission has recently raised the question of the relationship between switching rates and the underlying question of access.\textsuperscript{27}

The Commission's power to compel joint use of terminal facilities (including main-line track for a "reasonable distance" outside the terminal)\textsuperscript{28} involves the direct use of the owning carrier's facilities, and the Commission must have compelling reasons for so ordering.\textsuperscript{29} The Intramodal Rail Competition proceeding. The decision was appealed to the District of Columbia Circuit, Midtec Paper Corp. v. United States, No. 85-1476 (D.C. Cir. July 20, 1985). Shortly thereafter the Commission announced its intention to file a Motion to Remand with the court (Oct. 31, 1985). In an order dated April 29, 1986, the court granted in part and denied in part the Commission's order, choosing to retain jurisdiction over the issue of joint use of terminal facilities and remanding the issue of reciprocal switching. The Commission's request for rehearing seeking to have the matter remanded in its entirety initially was denied (D.C. Cir. June 4, 1985), but ultimately was granted an order served July 11, 1986. On October 9, 1986, the Commission once again voted to deny Midtec access.

In Central States Enterprises, Inc. v. Seaboard C.L.R.R., No. 38891, slip op. (I.C.C. July 6, 1983), the Commission reversed a Review Board's grant of reciprocal switching which would have allowed Southern Railway to serve Central States' Camilla, Georgia, grain elevator located on Seaboard. Central States had sought access through either reciprocal switching or use of Seaboard's terminal facilities. The Commission found relief inappropriate in the absence of a demonstration by Central States that Seaboard's service was inadequate or its rates were unreasonable. The Seventh Circuit Court of Appeals has upheld the Commission. Central States Enterprises, Inc. v. I.C.C., 780 F.2d 664 (7th Cir. 1985).

26. In Universal Forest Products, Inc. v. Seaboard C.L.R.R., No. 29883 (I.C.C. Dec. 17, 1985), the Commission declined to review directly the merits of a finding by Division 1 of the Commission that refused to grant Southern Railway reciprocal switching to Universal's plant, served exclusively by the Seaboard. Instead, the Commission ordered oral hearings to consider the issue in light of the recent regulations promulgated in Standards for Intramodal for Rail Competition (I.C.C. Oct. 31, 1985).

Southern was never a party to this proceeding, which was one factor in the Division's denial of Universal's request. However, in a subsequent decision, the Commission raised the possibility that reciprocal switching could be made available even if Southern did not participate in the proceeding (I.C.C. April 12, 1986). At present, the proceeding is being held in abeyance while the parties pursue a negotiated settlement (I.C.C. May 27, 1986).

27. In Soo Line R.R. v. Chicago & N.W. Transp., No. 39176 (I.C.C. Dec. 26, 1985), Soo Line challenged the level of certain CNW switching charges and argued that such rates should be adjudged by standards different from those applying in line-haul maximum rate reasonableness cases. The Commission denied Soo Line's appeal of an Administrative Law Judge's decision that found Soo Line was required, and failed, to prove market dominance and the unreasonableness of the level of the switching rates. See Maryland Port Authority—Lawfulness of Switching Charges No., 38899 (I.C.C. March 9, 1984), appeal denied, June 18, 1984. The Commission reopened the proceeding and requested the parties to comment on the potential application to the proceeding of the regulations recently adopted in Standards for Intramodal Rail Competition.

Cases such as these are likely to provide a forum for debating the assertion by some that a rate which is less than a reasonable maximum can nonetheless unlawfully restrain efficient competition.


state Commerce Act grants the Commission no general authority to compel the grant of trackage rights.30

B. Appeals for Competitive Access Through Federal Legislation

Unsatisfied with the Commission's handling of the competitive access issues, shippers and carriers have sought additional forums for relief. Now pending before Congress are two pieces of proposed legislation that would substantially affect the circumstances under which physical access could be compelled by the Commission. The "Consumer Rail Equity" or CURE bills31 seek to amend section 11103 of Title 49 to permit shippers, carriers, and any "other party directly impacted" to gain access to the use of another railroad's facilities.32 The "Railroad Antimonopoly Act" would amend the Sherman Act to provide an antitrust remedy to shippers and other railroads for a railroad's denial of the use of its "sole facility" under certain circumstances.33

Under existing law, shippers and other non-carriers lack legal standing to gain access for themselves. They may negotiate voluntary agreements, however, in their non-common carrier capacity to provide a portion of their own rail transportation outside the purview of the Interstate Commerce Act, and they may act as advocates for the grant of access to carriers.34 Like carriers, the legitimacy of their attempts to gain access must be determined by economic principles.

III. The Economics of Competitive Access

Regardless of whether it is achieved through establishment of a joint

at 3 (I.C.C. May 15, 1984), aff'd Central States Enterprises, Inc. v. I.C.C., 780 F.2d 664 (7th Cir. 1985).

The standards governing cases seeking the compelled use of terminal facilities also govern reciprocal switching. H.R. Rep. No. 1430 96th Cong., 2d Sess. 116, 117 (1980); Central States Enterprises, Inc. v. I.C.C., 780 F.2d 664 (7th Cir. 1985). However, the Commission has acknowledged that the grant of reciprocal switching is the less intrusive remedy. Midtec v. Chicago & N.W. Transp. Co., No. 39021, slip op. at 3 (I.C.C. August 30, 1983).

30. However, the Commission may order trackage rights under extraordinary circumstances, such as a condition of a merger, 49 U.S.C. § 11134 (1982), or to alleviate a car shortage emergency under 49 U.S.C. § 11123(a) (1982).


32. Section 9(b) of CURE provides, in part, that any "shipper, receiver or other party directly impacted" may petition the Commission for joint use of terminal facilities.


rate, reciprocal switching, or use of a terminal facility, access is economically rational (and publicly beneficial) only where it enhances competition, and hence stimulates efficiency. The reason consumers of transportation services seek access either for themselves or for another carrier is the perception that the introduction of an additional competitor will provide the potential for exerting downward pressure on price. As we shall see, downward pressure on price sometimes, but not always, enhances competition and stimulates efficiency.

Similarly, a carrier will be motivated to seek access only where it has the ability to capture traffic as a result of its entry, and thereby enhance its contribution (profit). In the long run, this translates into a requirement that the entrant provide at a lower cost the service now being performed by the owning carrier. A higher-cost entity does not have the ability to do this.

Moreover, truly "competitive" access need not be compelled. As the following discussion illustrates, it is in the economic self-interest of the owning railroad, through the voluntary grant of access, to purchase, or "buy," a portion of the service from a competitor at a cost lower than it can provide, or "make," itself. In such instances, the owning railroad stands to increase its profits by sharing in the cost savings generated by its participation in the more efficient endeavor.

The cost to the carrier of providing service will determine if it is more efficient, and therefore, will control the decision as to whether or not access is economically justified. An essential element of that cost will be the compensation paid the owning railroad for the use of its facilities.

This compensation is an inherent part of the existing statutory scheme. Regardless of whether the access is pursuant to a voluntary agreement or is compelled, the level of compensation should emulate the economics that would control a situation where access is granted voluntarily. The economic issues with respect to each of the forms of access

35. The Commission acknowledged the existence of the economic incentive for a carrier to participate in the more efficient joint service even where the carrier has exclusive access to the origin or destination of a movement. Rulemaking Concerning Traffic Protective Conditions in Railroad Consolidation Proceeding, 366 I.C.C. 112, 124-26 (1982), rev'd on other grounds, Detroit Toledo & Ironton R.R. v. United States, 725 F.2d 47 (6th Cir. 1984); see also Southern Pacific Transp. Co. v. I.C.C., 736 F.2d 708 (D.C. Cir. 1984) (upholding Commission determination that a railroad with alternative routing will continue to route traffic over through routes so long as it is economically prudent to do so).

36. In those instances where a railroad with market dominance acts irrationally and seeks to exercise its market power to drive its competitors out of business, sufficient recourse exists. See, e.g., 49 U.S.C. §§ 10701a, 10741(b) (1982).

37. 49 U.S.C. §§ 11103(a), (b), (c), (1); 49 U.S.C. § 11123(b)(2); 49 U.S.C. § 11124(b)(2) (1982).

38. It is a generally recognized principle that regulation should, to the greatest extent possible, replicate the results of a free competitive market. 1 A. KAHN, THE ECONOMICS OF REGULA-
are discussed below.

A. JOINT RATES AND THROUGH ROUTES

The notion that the interest of the owning carrier is best served by routing traffic efficiently, even where that carrier has market power and a competing single-line route, is most clearly illustrated and most widely accepted in the context of joint rates and through routes. Regardless of whether the overall rate is set by demand or by regulation, the cost of moving traffic via the more efficient route will be below that of the less efficient route, enabling participants in the more efficient joint route to share in the cost savings by negotiating mutually acceptable rates and divisions. In this context, this pricing concept has been endorsed by the

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39. Assume Railroad A has a choice of circuitous single-line service from Origin X to Destination Z or efficient through service in conjunction with Railroad B through Interchange Y:

As noted on the diagram, the amount of economically variable cost the carrier must cover before it makes a contribution to going concern value is $50 over segment X-Y, $50 over segment Y-Z via Railroad B, and $100 over segment Y-Z via Railroad A.

Assuming, first, a rate level of $150, set by demand or regulation, if Railroad A moves the traffic via its single-line route, it will only just cover its economically variable cost. If, however, it negotiates a joint rate division with Railroad B, or sets a proportional rate, A and B can share the $50 cost saving that results when the traffic moves via the through route.

The same holds true if the rate level is set by demand or regulation at $200. In this situation, A could earn $50 contribution over economically variable cost if the traffic moved over its single-line route, but it still has no incentive to move the traffic that way, so long as it can freely negotiate a division or set of proportionals with Railroad B that allows it to earn more over the more efficient through route. Since the prospect of a $100 contribution is available over the through route, both A and B have a clear financial incentive to negotiate a mutually profitable division or set of proportionals. If they do not, both will lose.
There are, however, two common misconceptions about the benefits arising from the availability of access through the voluntary establishment of multi-carrier routing. First, it does not actually introduce another competitor over the non-competitive portion of the route. Instead, access, voluntary or otherwise, assures that competitive rates will prevail for the through route. Second, a competitive rate is not necessarily a lower rate. Rather, it is one set at a level that enables the railroads providing the through service to recover their efficiently incurred total costs. Pricing at this level (like compensation to the owning railroad for access to its facilities) is necessary to ensure the long-term availability of the service.\(^{41}\)

**B. Switching**

The fact that railroads in the highly competitive deregulated environment increased switching rates is not surprising,\(^ {42}\) nor is the recent confusion over the relationship between switching rate levels and access.\(^ {43}\) Consistent with the analysis regarding joint rates, there is no economic incentive to decline to offer reciprocal switching where switching rates are set at economic levels. Similarly, the grant or order of reciprocal switching will not result in the physical presence of more than one carrier on routes where previously there was only one. The effect of publishing eco-


\(^{41}\) Total costs include variable and fixed and common costs. 1 A. KAHN, THE ECONOMICS OF REGULATION 20 (1970); W. BAUMOL, J. PANZAR, & R. WILLIG, CONTESTIBLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE 269-71 (1982).

\(^{42}\) For decades, railroads performed reciprocal switching with little apparent regard for the costs of those services. Reciprocal switching was viewed as an accommodation that mattered little, so long as railroads provided switching for one another. Eventually, competition and bankruptcy forced carriers to examine each of their charges and the associated costs. Many railroads found that the charges covered only a small fraction of the true current cost of providing switching. Accordingly, individual railroads began to bring their switching rates into line with their costs and the value of the services they provided. The Commission observed that the ongoing rate restructuring was consistent with Congressional intent as embodied in the Staggers Act:

It is not surprising that one result of this industry about-face on the prior joint rate-open routing practice would be corresponding change in approach to the byproduct of it—reciprocal switching.

The rate structure for reciprocal switching was, for many carriers, in need of revision. In part because these rates were rarely, if ever, subject to general rate increases, they tended to be very low and in some cases may not even have covered marginal cost. Therefore, we see carriers critically evaluating the cost and benefits of reciprocal switching on the basis of individual markets. We cannot conclude that this type of behavior is anticompetitive per se.

Standards for Intramodal Rail Competition, slip op. at 10 (I.C.C. July 7, 1983).

\(^{43}\) See discussion supra at 6-7, note 27.
nomic, non-discriminatory switching rates is simply to ensure that the line-haul movement will be handled by the more efficient carrier.

Switching charges should be developed on the same basis as rail services in general. To the extent shipper demand permits, the sum of the revenues from the terminal operations, whether generated by the owning or tenant railroad, must at least cover the total costs (determined on a replacement cost basis) of the terminal in which reciprocal switching service is provided. In the absence of compensation at this level, the facility cannot be operated on a long-term basis.

There have been essentially two types of concerns expressed with respect to the increase in the level of switching rates. The first is that the rates are unreasonably high. Yet, the mechanism for relief for unreasonably high switching rates is already in place. The Commission has held that nothing distinguishes the determination of the reasonableness of a switching rate from that of a line-haul rate, or the method by which that reasonableness is challenged. The second is that increases in switching charges are anticompetitive when set at a level that effects a "price squeeze" on the non-serving carrier by disadvantaging that carrier in competing for the line-haul movement. This can occur as a result of an increase in the switching rate itself or a decrease in the switching carrier's line-haul rate or both. However, this concern ignores the fact that the economic interest of the switching carrier will not be served by such action, since a predatory price squeeze will result in lower earnings for the railroad than if rates were set at a level that permitted both carriers to share in the cost savings of the more efficient route.

44. Because of differences in the elasticity of demand for various commodities moving through the terminal, the total cost of the facility may not be able to be borne equally by all the traffic using it. The actual switching charges will reflect these variations in demand for the service, requiring different rates for different commodities, and within commodities, different rates for different origins and destinations. Willig, MultiProduct Technology and Market Structure, 69 Am. Econ. Rev. 346-51 (1979); Contestable Markets and the Theory of Industry Structure, supra at note 41.


47. "Predation" refers to a course of action undertaken by a firm with market power in which it sacrifices short run profits by lowering prices to drive current and potential competitors out of the market for a period sufficiently long to permit the predator to recoup its initial losses and more, through the monopoly profits made possible by the absence of competition. For predation to be realistic, the suspect firm must be in a position to sacrifice short term profits sufficiently great to undermine the viability of its competitor's operation. Moreover, the competitors must be unable to withstand such pressures, and once driven out, it must be difficult for them to
C. OPERATING RIGHTS OVER SHARED FACILITIES

Existing law also permits carriers to gain physical access through operating rights into the terminal facilities of a serving railroad.\(^{48}\) Proposed legislation, such as the CURE bills, would extend this right beyond carriers to shippers and other interested entities and expand the instances in which this relief was available.\(^{49}\) Yet, even where an entity obtains physical access over the previously non-competitive portion of the movement, prices for that portion of the service will not be driven below a level that precludes the recovery of the efficiently incurred total costs of the facility being subjected to the access.

Like the determination of the appropriate switching charges, pricing at this level is necessary to ensure reinvestment that will guarantee that the facility will be available in the long run for use by either entity. As a result, the entrant will not be in a position to charge for its services over the shared facility an amount below the level of the efficient cost it must pay to the owning railroad.

Since access achieved under any of the existing or proposed statutory provisions will be sought in the context of existing laws, regulations, and contractual relationships, any additional costs imposed on the owner and the entrant must be factored into the equation in determining whether access is economically justified.

IV. COST COMPONENTS OF GAINING ACCESS—COMPENSATION TO THE OWNING RAILROAD

The nature of full compensation to the owning railroad is a critical issue in the competitive access debate. Unless the owning railroad is fully compensated, competitive access will simply be an euphemism for the uneconomic subsidization of the entrant by the owning carrier, ultimately resulting in the owner becoming unable to maintain the facility which is the subject of the access.

The statutory provisions for fixing compensation in cases of compelled access support the concept of full compensation.\(^{50}\) With respect

\(^{48}\) See Chesapeake & Ohio Ry. v. United States, 704 F.2d 373, 377 (7th Cir. 1983); CONTESTIBLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE, at 27, supra at note 41.


\(^{50}\) See discussion supra at 7-8, note 31.

Congressional enactments of provisions permitting private property to be taken for pub-
to compelled access to terminal facilities, the terms governing compensation are expressly addressed in the Interstate Commerce Act, which provides that if the carriers cannot negotiate "conditions and compensation for use of the facilities," the Commission will set the terms in accordance with the "principle controlling compensation in condemnation proceedings."51 Moreover, the statute provides that a carrier whose terminal facilities are required to be used by another carrier under section 11103(a) may file a civil action to recover compensation for the use.52

Post-Staggers, the Commission has had no occasion to fix compensation in a compelled-access proceeding.53 The Commission, however, has indicated that the level and nature of compensation in cases of forced access continue to be governed by the standards set forth in Missouri-Kansas-Texas Railroad v. Kansas City Terminal Ry.,54 which held that

lic use must satisfy the constitutional prohibition of the Fifth Amendment that such taking not be without just compensation. Hastings Commercial Club v. Chicago M. & St. P. Ry., 107 I.C.C. 208, 212 (1926) (citing Monongahela Nav. Co. v. United States, 148 U.S. 312, 327 (1893)).

52. 49 U.S.C. § 11103(b) (1982). The legislative history of Section 405 of the Act of 1920, which addressed Section 3(4), the predecessor to section 11103(b), indicates that the civil action authorization was intended as a broad measure. The Conference Report states:

Section 30. It is provided that the Commission, if it is found to be in the public interest and practicable, may require one carrier to allow another to use its terminal facilities, including main line track for a reasonable distance outside of a terminal, on such terms as the carriers may agree upon, or as the Commission may fix, subject to the right, however, of the carrier whose terminal facilities, are thus thrown open to sue for any damages sustained or any compensation owed.


53. The Commission did have occasion to set the compensation for trackage rights granted in connection with a merger. In Trackage Rights Compensation, F.D. 30,000, slip op. (Sub-Nos. 16, 18, and 25) (I.C.C. August 10, 1984), the Commission set fees for several carriers in connection with its grant of trackage rights intended to ameliorate the anticompetitive effects of the Union Pacific merger with the Missouri Pacific and Western Pacific Railroads. The Commission rejected the use of valuation methods based upon replacement costs and book value and adopted instead a capitalized earnings approach to reflect the potential earnings of the lines over which trackage rights were granted. The approach was designed to reimburse the Union Pacific for (1) variable costs incurred as a result of the users' operation, (2) users' share of maintenance and operation and car-mile percentage use basis, and (3) users' share of an interest rental component representing return on investment on a usage basis.

This is a different approach than that traditionally used by the Commission in fixing compensation in situations of forced access, which the Commission recognized, stating, "this is not to say that . . . the methodology used here is appropriate outside the immediate setting where trackage rights have been imposed to remedy anticompetitive effects of a consolidation." id. at 10.


It is difficult to conceive of any "compensation" that is unjust and the word "just" is used evidently to intensify the meaning of the word "compensation," to convey the idea
owning and tenant carriers must share equally both the fixed and variable costs of the shared facility, without regard to their respective levels of its use. The Commission explicitly rejected the idea that compensation, including a reasonable return on the value of the facility, should be based solely on the extent of use: “The major portion of the cost of providing these terminal facilities bears no relation to the amount of use made of them; interest and taxes continue regardless of use.” 55. The Commission

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that the equivalent to be rendered for property taken shall be real, substantial, full, ample. As the Supreme Court said in Monongahela Navigation Co. v. United States, supra: . . . But this just compensation, according to Lewis on Eminent Domain, section 694, may be more or it may be less than the mere money value of the property actually taken. The owner must receive a fair indemnity for his loss and “to arrive at the fair indemnity, the interests of the public and of the owner and all the circumstances of the particular appropriation must be taken into consideration.”

In United States v. Rogers, 257 Fed. 397, 400, the court said:
Just compensation rests on equitable principles, and it means substantially that the owner should be put in as good position pecuniarily as he would have had if his property had not been taken.

In Seaboard Air Line Ry. v. U.S. [sic], 261 U.S. 299, 306, the Supreme Court said:
The requirement that “just compensation” shall be paid is comprehensive and includes all elements.

In United States v. Grizzard, 219 U.S. 180, 184, the following discussion appears:
The “just compensation” thus guaranteed obviously requires that the recompense to the owner for the loss caused to him by the taking of a part of a parcel or single tract of land shall be measured by the loss resulting to him from the appropriation. If . . . the . . . taking of a part . . . has depreciated the usefulness and value of the remainder the owner is not justly compensated by paying only for that actually appropriated and leaving him uncompensated for the depreciation over benefits to this which remains. In recognition of this principle of justice it is required that regard be had to the effect of the appropriation of a part . . . upon the remaining interest of the owner, by taking into account both the benefits which accrue and the depreciation which results to the remainder in its use and value.


The Commission thus rejected the contention that compensation be based solely on the extent of the non-owner’s use of the facility, concluding, “determining the amount of just compensation, we must confine ourselves to the loss to be suffered by the Milwaukee.” Id. at 213-14.

In Hastings Commercial Club, the Commission had set out to determine the appropriate level of compensation due the Milwaukee for use of its terminal facilities by the Chicago, Burlington & Quincy Railroad, which had been ordered in a prior proceeding. 69 I.C.C. 489. After determining that the level of compensation owed the Milwaukee far outweighed the revenue earning ability of the less-efficient Burlington, the Commission reversed its earlier order on the grounds that the access was not in the public interest. The Court stated:
The cost to be met by the user carrier as compared with the traffic served, is an important element [of the public interest] . . . the record upon which our former report was based contained no evidence as to the compensation on the principles controlling in condemnation proceedings. Fairness demands that the whole question of “public interest” be now recon sidered on the more complete record before us . . . and our previous holding . . . revised and reviewed.

Id. at 216-17.

The Hastings decision, which was relied upon by the Commission in Missouri-Kansas-Texas, was recently cited with approval by the Seventh Circuit in Central States Enterprises v. Interstate Commerce Commission, 780 F.2d 664 (7th Cir. 1985).

found that the numerical basis, "that is, adjustment in relation to the number of users of the terminal regardless of the individual use of those lines . . . affords the just and reasonable method to be applied." 56

Moreover, the Commission has embraced the principle announced by the Supreme Court in *Boston Chamber of Commerce v. Boston*, 57 that in setting compensation "the question is, What has the owner lost?[sic] not, What has the taker gained?" 58

While the statutory standards governing the computation of compensation for compelled reciprocal switching are not expressly tied to those of condemnation, 59 the Commission is clear that an owning carrier should be "fully compensated." 60 As discussed above, there is no economic or legal basis for distinguishing the amount of compensation in one access context from another.

It is not clear that the proposed CURE legislation would change this. 61 The CURE legislation 62 would alter the reference to the standards for fixing compensation in condemnation proceedings in Section 11103(a) to provide that, if the carriers are unable to agree, the Commission would establish compensation at a level not to exceed the costs incurred by the owning carrier in making the facilities available, including "both variable costs and an allocated share of fixed costs and a reasonable return." 63

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56. Id. at 9-10.
57. 217 U.S. 189 (1910).
58. Id. at 195; Hastings Commercial Club, 107 I.C.C. at 213.
60. See Universal Forest Products, Inc. v. Seaboard C.L. R.R. F.D., No. 29983, slip op. at 5-6 (I.C.C. Nov. 8, 1982), appeal pending. ("Before the enactment of the Staggers Act, it was notoriously difficult for a railroad to justify switching charges that fully covered its terminal costs and earned it a profit . . . Since passage of the Staggers Act, and its provisions encouraging railroad rate flexibility, the switching carrier should be fully capable of setting its charges at a fully compensatory level."); see also Hastings Commercial Club, 107 I.C.C. at 212-13, cited with approval for this proposition by Central States Enterprises v. I.C.C., 780 F.2d 664 (7th Cir. 1985).
61. See discussion infra, at 17 note 66.
62. Section 9(b) of the House version and section 7(b) and 9(b) of the Senate versions provide in pertinent part:

Such compensation shall not exceed the costs incurred by the owning carrier in making its facilities available for use by the other carrier (including both variable costs and an allocated share of the fixed costs and a reasonable return, associated with the facilities actually being used by the other carrier).

63. The CURE bill would also require the Commission to establish compensation for reciprocal switching at the prevailing level employed as the Commission's jurisdictional threshold under 49 U.S.C. § 10709(d)(2), unless a carrier demonstrates that some higher level is reasonable and necessary. Section 9(b)(2) deletes existing section 11103(c)(1) and provides in lieu thereof:
The Railroad Antimonopoly Act would amend the antitrust laws and thus would not disturb the compensation provisions of the Interstate Commerce Act. However, the concept of "just compensation" to the owning railroad is embodied in this bill as well.64

We now must turn to one of the most prominent elements of cost, and hence compensation, the cost of displaced labor.

(c)(1) Upon petition of any interested rail carrier, shipper, receiver, or other party directly impacted, the Commission shall establish compensation for reciprocal switching performed by a rail carrier at a level not to exceed the percentage then in effect under section 10709(d)(2) of actual variable costs for such service, unless that carrier demonstrates that a higher level of compensation is reasonable and necessary for such switching service.

64. The amended version of the bill would render railroads that "deny use" of any sole facility to be in violation of the antitrust laws. It defines such "use" as "use by means of obtaining transportation services over it by means of a competing carrier upon reasonable terms including just compensation and in accordance with generally accepted principles of operation." Section 9(c)(4)(B) (emphasis added).

The inclusion of the reference to "just compensation" represents a change from an earlier version which provided that rates over the "sole facility" could be "no higher than would yield a fair return on the proportion of the owner rail carrier's prudent investment in the sole railroad facility that the shipper's traffic bears to all traffic using such sole railroad facility." This provision was strongly criticized by the Department of Justice as not guaranteeing adequate compensation to the owning railroad. In his prepared remarks regarding S. 447 and H.R. 1140, to both the Senate Committee on the Judiciary and the House Subcommittee on Monopolies and Commercial Law, Charles F. Rule, Acting Assistant Attorney General, Antitrust Division, stated:

If a carrier currently providing rail service at competitive rates is required to grant access over its lines, market distortions will occur unless the trackage right rental rate covers the true cost of providing access to the second carrier. If the rental is set too low, investment in the facility will decrease and service to the shipper will deteriorate. If a court happens to find the terms set by competitive forces to be unreasonable, then the carrier faces not only the prospect of a court-decreed reduction in the rate but also an automatic treble damage penalty for the overcharge. Thus, when regulation is attempted with respect to significant segments of a carrier's trackage, the chances of setting the proper rate are reduced and the adverse impact of the error is increased.

Because shippers can be expected to use the proposed remedies to obtain lower shipping rates, even when the rates are already competitive, the bill also seriously threatens to undercut the goal embodied in the Staggers Act of enabling railroads to earn a competitive rate of return. The history of rate of return regulation generally has been to undercompensate regulated entities for their investments. In particular, the risk of investments tends to be underestimated with the result that the regulated firms earn less than a market rate of return. The effect is to discourage socially beneficial investment. This danger is manifest in H.R. 1140's [S. 447's] requirement that rates can be "no higher than would yield a fair return on the proportion of the owner rail carrier's prudent investment in the sole railroad facility that the shipper's traffic bears to all traffic using such sole railroad facility." The fact that this directive will be enforced by courts that institutionally are not well-suited to make such determinations, and that may reach disparate results, magnifies the potential threat to the railroads' ability to earn a market rate of return.

V. LABOR PROTECTION\textsuperscript{65} LIABILITY AS A COMPONENT OF COST

Under existing law, owning railroads may incur certain costs that result solely from the grant of access, whether voluntary or compelled. The foregoing discussion makes clear that the owning railroad is entitled to be fully compensated for these costs. To date one potential cost which participants in the access debate have largely ignored is that of liability for labor protection, \textit{i.e.}, liability that may result if the grant of access causes a reduction in the number of employees needed by the owning railroad.\textsuperscript{66}

For example, if Railroad A is the sole carrier serving Industry, and Industry desires to provide its own service between its plant and Railroad A's main line, the provision of this service by Industry will make unnecessarily

\textsuperscript{65} See the definition of the term "labor protection" at Footnote 8, \textit{supra}.

\textsuperscript{66} Under existing law, if the owning railroad is subject to liability from a reduction in labor due solely to the provision of service by the new entrant, the owning railroad must be compensated for these costs in order to place it in a position equal to that which existed before the access was granted. This is consistent with the spirit of fixing compensation in condemnation proceedings (that the owning railroad be made whole), the standard referenced expressly by Congress in 49 U.S.C. § 11103(a). See discussion \textit{supra} at 14, note 56.

Since the labor protective costs would arise solely as a result of the access, they would be, in this instance, purely variable with the access and included in the compensation formula of the proposed CURE bills as well. (See discussion \textit{supra} at note 62-63). Regardless of the label, compensation for liability to labor is required to make the owning carrier whole.

The recent decision in Illinois Commerce Comm'n v. I.C.C., 776 F.2d 355 (D.C. Cir. 1985) we believe is incorrect but still is not inconsistent. The Court agreed that labor costs were to be considered avoidable for purposes of determining the propriety of abandoning lines under Section 10903, but not in computing a subsidy under Section 10905 where the labor protection costs would be imposed after the abandonment.

While not controlling in the context of competitive access, the Circuit Court's decision does serve as an example of how the misapplication of the costs of labor protection can distort the economics of a business decision.

The Congressional objective in providing for continued service over a line scheduled for abandonment by permitting interested parties to subsidize its operation was to ensure that railroads would break even. 354 I.C.C. 129, 157 (1976). (During the term of the subsidy the continuance or non-continuance of the operation should be a matter of "economic indifference" to the railroad.)

Notwithstanding this directive, the Court ruled that employee wages may not be considered when computing the amount of the required subsidy, reasoning that (1) during the first year after abandonment the railroad would not save employee wages because it would still have to pay them under the labor protective conditions which the Commission is required to attach; (2) labor protective costs are equal to the labor cost component of providing service; therefore, (3) during the subsidy year, labor costs are not avoidable and should be disregarded.

In the absence of a subsidy offer, the Commission's abandonment certificate includes standard labor conditions. A subsidy places the abandonment on hold and defers payment of labor protection. When the subsidy expires, the Commission then issues the abandonment certificate, and the deferred labor protection costs are paid. In short, a subsidy defers cost; it does not reduce or eliminate them.

The effect of the Court's ruling is to deny the railroad recompense for labor costs incurred solely as a result of the subsidized service. We believe that this result contradicts the assumptions underlying the statutory provision permitting the subsidy.
necessary that portion of Railroad A’s service. If this results in a reduction in Railroad A’s labor force, Railroad A may be subject to liability.

If a competitive access transaction involves the acquisition by a railroad of trackage rights over, or joint ownership in or use of, a railroad line owned or operated by another railroad, the Commission is required by statute to impose labor protective conditions. Accordingly, a displaced or dismissed employee is afforded labor protection for a protective period of up to six years, pursuant to what is known in the industry as the Norfolk & Western conditions. A displaced employee is paid a monthly displacement allowance of the difference between current earnings and the monthly average of the employee’s earnings in the twelve-month period immediately preceding the displacement for a period of up to six years. Similarly, a dismissed employee is paid, for up to six years, a monthly dismissal allowance which is equal to one-twelfth of the employee’s combined monthly earnings in the twelve-month period prior to dismissal. The employee also may elect to resign and accept a lump-sum separation allowance which, depending upon the employee’s length of service, will range in amount from three to twelve months of earnings.

In contrast, the imposition of labor protective conditions is a matter of Commission discretion where Industry (or Railroad B), located in a terminal area, is successful in requiring Railroad A to enter into a reciprocal switching agreement allowing Railroad B to switch Industry’s cars. The Commission has such discretion both under existing section 11103(c)(2) and under the proposed amendment of the CURE legislation.

However, not all labor protection costs derive from the Interstate Commerce Act. Some may arise as a result of job stabilization agreements negotiated and agreed to between management and rail labor.

69. A displaced employee is one who is continued in service but whose compensation or rules governing his working conditions are adversely affected. 354 I.C.C. at 610.
70. 354 I.C.C. at 610-11.
71. 354 I.C.C. at 612.
72. 49 U.S.C. § 11103(c)(2), which would remain unchanged by CURE, states as follows:

The Commission may require reciprocal switching agreements entered into by rail carriers pursuant to this subsection to contain provisions for the protection of the interests of employees affected thereby.

There is no similarly express provision granting such discretionary authority to the Commission with respect to compelled access to joint terminal facilities. See, Section 11103(a). However, language that would grant the Commission authority to apply “appropriate labor protection provisions” to such grants of access was included in a version of Conrail sale legislation passed by the House Subcommittee on Transportation, Commerce and Tourism (Sec. 207), although ultimately rejected by the full House Committee on Energy and Commerce.
Most frequently, these job stabilization agreements occur as a result of railroad mergers or combinations.

As an example, most of the nation’s railroads and rail unions became a party to the Washington Job Protection Agreement of May 21, 1936 ("WJPA"). The WJPA was formulated to assuage Congressional concern, as expressed by the passage of the Emergency Transportation Act of 1933, that railroad acquisitions and mergers would create further unemployment at a time when the nation could ill afford it. The WJPA’s premise was that the efficiencies of reduced labor costs resulting from consolidations were to be shared between railroads and rail labor. Under the WJPA, employees who are "affected" by a "co-ordination" of two or more rail carriers are entitled to either a "displacement" or a "co-ordination" allowance.

The WJPA is still in effect today on most railroads. It has also become the basis for negotiated job stabilization agreements between rail labor and management.

As stated earlier, labor protective conditions can be triggered from three sources. The first two are imposed by the Commission, whether required by statute or imposed at the Commission’s discretion. The third source is rail industry agreements that labor and management have negotiated to address rail labor’s job stabilization concerns. On occasion, there may be a fourth source for labor protection liability in the form of an applicable collective bargaining agreement that grants exclusive work rights to a particular railroad’s employees. The nature and extent of this source of labor protection liability is potentially more burdensome than those previously discussed. Furthermore, under limited circumstances...

76. Section 2(a) of the Washington Job Protection Agreement of 1936 defines "co-ordination" as "joint action by two or more carriers whereby they unify, consolidate, merge or pool in whole or in part their separate railroad facilities or any other operations or services previously performed by them through such separate facilities." See also R. Ables, The History of an Experience Under Railroad Employee Protection Plans, PRESIDENTIAL RAILROAD COMMISSION, Washington, D.C. February, 1962.
77. Under the WJPA, a displaced employee is entitled to a monthly compensation guarantee for a period not to exceed five years, computed similarly to that under the N&W Conditions, supra. If deprived of employment altogether, the employee is entitled to a monthly allowance of sixty percent of the compensation earned in the prior twelve month period, for a period of time ranging from sixty days to five years, depending upon the employee’s length of service. In lieu of the coordination allowance, an employee can elect to resign and accept a lump-sum separation allowance which, dependent upon the employee’s length of service, will range in amount from three to twelve months of earnings. Washington Job Protection Agreement of 1936, Sec. 6, 7(a) and 9.
79. The Railway labor Act authorizes the National Railroad Adjustment Board to award rein-
a federal court may be empowered to issue an injunction pursuant to the Railway Labor Act which would terminate the tenant’s access.\textsuperscript{80}

The costs of labor protective conditions imposed on competitive access transactions by labor agreements are difficult to predict. After all, there are scores of railroad labor agreements that apply across the country, and no one can guess with confidence how labor and management may have defined the work rights of any particular group of rail employees. Indeed, work rights may differ not only from one railroad to another, but also within a single railroad, especially one that has seen recent merger or consolidation activity.\textsuperscript{81} Moreover, it is not clear whether Commission access orders which address the issue of labor protective conditions supersede claims by railroad employees based upon such agreements. The state of the law in this area is unsettled, and rail labor is challenging the Commission’s authority to supersede labor agreements.\textsuperscript{82} There are very sound reasons to reject the challenge by rail

\textsuperscript{80} In Maine Cent. R.R. v. United Transp. Union, United States District Court of Maine, C.A. No. 85-0346-P, the railroad entered into a lease of track with a shipper, enabling the shipper to perform its own switching operations. The United Transportation Union (UTU), representing twelve trainmen who would have been furloughed, requested injunctive relief voiding the lease. With little or no analysis, the District Court found that the lease had no controlling effect over the railroad’s relationship with the UTU, and that the railroad had violated its duty under Section 6 of the Railway Labor Act to maintain the “status quo” pending exhaustion of the “major dispute” Railway Labor Act negotiation and mediation procedures. The District Court issued a permanent injunction ordering the railroad to return conditions to the status quo ante, effectively voiding the lease agreement.

In a decision served April 9, 1986 (No. 86-1037), the Court of Appeals reversed the District Court, directing that an injunction be issued in favor of Maine Central. The Court found that the railroad’s reliance on past practice to authorize the lease transaction was “arguable,” making the dispute a “minor,” rather than “major,” one under the Railway Labor Act. The reversal of the District Court turned upon the existence of “past practices,” which may or may not exist in future similar cases.

“Minor disputes” over labor agreement interpretation are reserved to Adjustment Boards, chaired by neutral arbitrators, under the Railway Labor Act. In contrast, courts interpret labor agreements when presented with “major disputes,” i.e., efforts by either the railroad or rail labor to change the “status quo” as to rates of pay, rules, or working conditions. As the Maine Central case illustrates, the line between minor and major disputes, while understandably blurred, is significant. See Brotherhood Ry Carmen v. Norfolk & W. Ry., 745 F.2d 370, 374-78 (6th Cir. 1984).

\textsuperscript{81} Conrail is a good example. When it began operation in 1976, it had over 250 labor agreements covering 25 separate labor organizations. Fortunately, Congress had the foresight to order negotiation of a single agreement for each craft. See 45 U.S.C. § 797(g) (1982). However, the impetus for consolidation is generally not available absent special legislation.

\textsuperscript{82} Rail labor’s challenge to the Commission’s authority to supersede the Railway Labor Act and collectively bargained agreements was most recently in evidence in its opposition to the Commission’s grant of trackage rights to the Missouri-Kansas-Texas Railroad (MKT). These rights were a condition to the October 20, 1982, order which approved the consolidation of the
labor, but the course of litigation over hundreds of different labor agreements cannot be predicted with certainty. Even interim injunctive relief can substantially delay and vitiate the benefits of an access transaction while courts and arbitrators sort out conflicting claims.

It is evident that labor protective costs, whether imposed under the Interstate Commerce Act or applicable labor agreements, can be substantial. Indeed, the effect of such payments is to increase total labor costs for the duration of the protective period, for during this period both the employees of the entity gaining access and the protected employees must be paid. The result is that the cost of access to shippers and the public may well exceed the benefits.

Although many of rail labor’s claims for labor protection under the Interstate Commerce Act or pursuant to labor agreement or under the Railway Labor Act’s provision for maintenance of the "status quo" are not strong, they do present problems. A challenge by rail labor will delay the resolution of competitive access cases and add greatly to the cost of access. Notwithstanding the merits of rail labor’s claims or the source of the claimed labor protection, such costs, if proper, must be borne by the party gaining access.

VI. CONCLUSION

Competitive access is a phrase which connotes low prices, efficiency, and all the benefits of a free market. Hidden within the concept,

Missouri Pacific (MOPAC) and the Union Pacific (UP) Railroads. The grant of trackage rights to MKT allowed MKT to use its own employees over specified portions of consolidated MOPAC-UP track, subject to employee protective conditions (N&W conditions) for displaced or dismissed employees.

In one challenge, the United Transportation Union and Brotherhood of Locomotive Engineers petitioned a court to vacate that part of the Commission’s order pertaining to crew selection. The unions asserted that MOPAC train crews had an established right to crew assignments operating over MOPAC track, that the railroads had unilaterally changed the status quo in violation of the Railway Labor Act, and that the Commission did not have authority under Section 11341 to exempt the grant of trackage rights from the Railway Labor Act. The court remanded the case to the Commission, requiring the Commission to demonstrate that the exemption was "necessary." Brotherhood of Locomotive Engineers v. I.C.C., 761 F.2d 714 (D.C. Cir. 1985). The Commission’s orders are still in force. The Supreme Court has granted certiorari in this case. — U.S. —, 106 S. Ct. 1457 (1986).

In a second challenge, the UTU threatened to strike MOPAC, effective April 4, 1983. In response, MOPAC filed a complaint seeking to enjoin the strike. The District Court granted the injunction. Missouri Pac. R.R. v. United Transp. Union, 580 F. Supp. 1490 (D. Mo. 1984). The injunction was subsequently appealed by the UTU. The Eighth Circuit upheld the decision of the District Court, finding that the Commission had exempted the transaction, pursuant to Section 11341(a), from the major dispute requirements of the Railway Labor Act, and that permanent injunctive relief was warranted. The UTU has petitioned the Supreme Court for a writ of certiorari which has not yet been ruled upon. 782 F.2d 107 (8th Cir. 1986), petition for cert. filed, 54 U.S.L.W. 3463 (U.S. Dec. 19, 1985) (No. 85-1054).
however, are the same economic principles which govern all enterprises, regulated or not. Those principles require that facilities used must be paid for in full; otherwise, the facilities will not be maintained. Full compensation in turn requires that all elements of cost be considered, including the cost of labor protection directly imposed by the Interstate Commerce Act or indirectly caused by congressional policies expressed in the Railway Labor Act.

Proponents of competitive access must recognize the reality of labor protection costs and the effects of those costs. Failure to do so will lead to litigation, acrimony, and eventual frustration of the objectives sought to be advanced.
A Law and Economics Study of Rail Freight Rate Regulation: Traditional Standards, Ramsey Prices, and a Case of Neither

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I. INTRODUCTION

The importance of economic analysis of the law is increasingly being recognized by those who study and implement the law. One role that the lawyer-economist can play in this dialogue between disciplines is to explain an existing aspect of economic theory to the non-economists, and
then show how it can be used to help evaluate particular legal issues.\(^1\) This article will be in that tradition, examining the setting of rail freight rates from a legal and economic approach.

In the next section, the economic theory of second-best, or Ramsey, prices will be presented. The theory applies to multi-product or multi-service firms with significant economies of scale. The general rule that emerges is that the less price elastic is the demand for a commodity or service relative to that of others, the higher should be its price or rate relative to marginal cost.

In light of this economic analysis, Section III then examines the traditional standards for judging the legality of rail freight rates; standards which have developed in the ICC and judicial case law. It is found that the application of the traditional concepts of cost characteristics and demand characteristics is largely in accord with the economic theory of Ramsey pricing; rates tend to vary directly with costs and inversely with demand sensitivity. Besides the inaccuracy involved in measuring cost and demand factors, a theoretical flaw found is that comparisons made between the demand characteristics of commodities are not typically carried far enough. That is, while a high rate may be justified due to a finding that demand is relatively insensitive to rate hikes, or inelastic, what courts typically fail to ask is whether demand is more or less inelastic than that of other commodities.

Section IV focuses on a recent controversy involving freight rates for recyclable and virgin materials where, prompted by Congress, the ICC and courts reached a result which departed from both the economic and legal standards developed in the earlier sections. Because of the possible significance of this departure, apparently due to an attempt to reach certain environmental goals, the process by which it was reached will be examined in some detail.

\[\text{II. THE THEORY OF RAMSEY PRICING}\]

Regulators are often charged with setting or approving the rates or prices of the output produced by the industry they regulate. Any time such intervention in or regulation of markets occurs, resource allocation is affected, as is the level of social welfare or well-being. This section first describes the "best," "most efficient," welfare-maximizing prices possible, and why they are unattainable with declining-cost industries. It then explains the theoretical resolution of the problem when applied to such

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firms which produce more than one type of output. This resolution is embodied in the notion of Ramsey prices.\textsuperscript{2} It is important to get a basic understanding of the theoretical implications of pricing in order to be better able to judge the appropriateness of legal standards of ratemaking.

One generally considers the use of second-best solutions to problems only when the first-best solution is unattainable. In pricing models, the first-best solution is to have price equal to marginal cost. Absent monopsonistic power, consumers will purchase the commodity or service until the value to them of the last unit consumed equals price. Assuming that price equal marginal cost, the efficient result of marginal cost equaling marginal utility is reached: the value to society of the last unit of consumption (the marginal utility) equals the value of the inputs used to produce that last unit (the marginal cost). Assuming declining marginal utility and increasing (or more slowly falling) marginal cost, fewer units produced and consumed would decrease total welfare since more would be given up (the value of lost consumption) than gained (the value of resources saved). Similarly, any additional units would decrease society’s welfare since, again, more would be given up (here the value of resources used in production) than gained (the value of additional consumption).

If, however, economies of scale are large relative to demand, production would occur where marginal cost is less than average total cost. In this case, first-best prices would lead to negative profits for the producer. Referring to Figure 1, if price is set efficiently such that it is equal to marginal cost (level \( a \)), the total revenue of the firm (price \( x \) quantity) is represented by the diagonally shaded area \( \text{OadX} \). Total cost (average cost \( x \) quantity) is the larger vertically shaded area \( \text{ObcX} \). The difference (total cost—total revenue), area \( abcd \), is the total loss the firm will incur in supplying that amount of output at price \( a \).

Since U.S. policy is to allow regulated firms such as railroads to be profit making enterprises without subsidy, prices must be allowed to rise above marginal costs. Pricing above marginal costs, however, decreases total welfare since output will be less than the most efficient output. This deadweight welfare loss is measured by the area between the demand and marginal cost curves (the amount by which the value of consumption exceeds the cost of production). Nevertheless, regulation would be relatively easy if firms produced only one output and could not price discriminate within its one market. The price would be set at a level where demand could cover all costs; that is, where price equalled aver-

\textsuperscript{2} The term "Ramsey pricing" is traced back to the early work of Frank Ramsey, \textit{A Contribution to the Theory of Taxation}, 37 \textit{Econ. J.} 47 (1927).
age total cost (at level e in Figure 1). If, however, the firm produced more than one product or service, the problem becomes more difficult.

In Figure 2 are drawn demand curves for two products or services offered by one regulated firm where marginal cost is less than average total cost. For simplicity, it will be assumed that in the relevant regions marginal costs will be constant and equal for the two goods ($MC^x = MC^y$). The most efficient price would equal this marginal cost with outputs $X$ and $Y$. In order for the firm to avoid a loss, however, the prices must be set somewhere above marginal cost. If prices for both were set an equal amount over marginal cost, say at $P^x = P^y$, the quantities demanded would drop to $X''$ and $Y''$. It can be seen, however, that the demand for

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3. Average total cost is a complex concept here because of the assumption of shared fixed costs. Since average total cost is defined as total cost divided by total output, the average total cost for any output of $X$ depends upon the level of output of $Y$. No average total cost curves therefore are drawn in Figure 2.
good Y is more price inelastic than that for good X. The adverse welfare impact of the same change in price (from $MC^X = MC^Y$ to $P^X = P^Y$) is much smaller in market Y than in market X since the change in output (from Y to Y' as opposed to X to X') and resulting deadweight welfare loss (the area of triangle ijk for market Y and of triangle fgh for market X) is smaller. If we are to charge prices above marginal costs, then, it would seem better in terms of minimizing deadweight loss (and so maximizing total surplus) to charge relatively higher prices on those commodities like Y which are relatively less responsible to price changes.

A crucial question of rate making is therefore to determine how far above marginal cost prices should rise for each commodity in order to minimize the social welfare loss of non-first-best pricing while still allowing the railroads to at least break even. This is where the theory of Ramsey pricing enters for it is precisely that question which the theory attempts to answer. If we start by defining the objective function as total surplus, or welfare, as measured by the area under the demand curves less total cost, the Ramsey price analysis solves the very problem of maximizing total surplus subject to the firm earning nonnegative profits.

The seminal work in this area was done by Baumol and Bradford in 1970 when they developed pricing rules for multiproduct monopolists. Braeutigam extended the analysis to cover the situation where there exist other competitive producers or modes of transportation. Janis developed a model which goes even further and allows the markets for the two

4. Price elasticity of demand is defined as the percentage change in the quantity demanded caused by a small percentage change in price. For a given percentage change in price, the larger is the percentage change in quantity, the more elastic, or less inelastic, is demand.


The basic result which applies to the Baumol-Bradford model as well as Braeutigam's when regulating only that firm with declining costs is that the percentage of the price which represents returns in excess of marginal cost for each good, weighted by its own-price elasticity of demand, should be equal to that for all other goods it produces:

\[
\frac{P^a - MC^a}{P^a} \varepsilon^a = \frac{P^b - MC^b}{P^b} \varepsilon^b = \ldots
\]

Referring back to Figure 2, since the demand for good X is more elastic than that for good Y (\(\varepsilon^X > \varepsilon^Y\)), the price for good X should be closer to marginal cost than that for good Y (or, given \(MC^X = MC^Y\), \(P^X < P^Y\)); a result consistent with our intuition. The result of Braeutigam's other model and of Janis' models have similar effect: The relatively lower is the own-price elasticity of demand, the relatively higher should be the price when compared to marginal cost.

It should be noted that these pricing rules are not definitive in and of themselves. Other considerations have been left out. For example, to the extent that the demand and cost curve fail to reflect externalities, such as the environmental or energy implication of the use of recyclable or virgin materials, the results of a Ramsey-price analysis will not lead to truly second-best prices. Perhaps a unit decrease in the use of recyclables is somehow more damaging or is more significant than a unit decrease in the use of virgin materials. Also left out of the analysis is a notion of fairness. While it may be more efficient to charge a higher price for the use of an inelastically-demanded commodity or service such as Y, is it fair, especially since it costs the same amount for both X and Y?

With this background in the welfare theory of pricing of multiproduct firms, let us now turn to an examination of how the ICC and courts traditionally have dealt with ratemaking issues. We will then turn to the specific case of rail rates for recyclable and virgin materials.

III. TRADITIONAL STANDARDS OF RATE LAWFULNESS

In the preceding section, a framework was developed which can be utilized to evaluate the efficiency, or welfare-maximizing tendency, of prices for a regulated multiproduct firm. This section now takes the setting of rail freight rates and holds it up to those theoretical standards. For rail freight rates to be lawful they must be both nondiscriminatory and

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8. See Appendix for a quick derivation of the basic results.
9. See Janis, supra note 7.
reasonable. With this in mind, the development in the case law of each
criterion is described and then analyzed from the economics perspective.
Significant accord is found between the case law and economic results,
though also found is some misinterpretation of movement data and often
a lack of intercommodity comparisons of demand sensitivities.

A. DISCRIMINATION

Section 2 of the Interstate Commerce Act [ICA] makes unlawful per-
sonal discrimination on "like and contemporaneous service in the trans-
portation of like kind of traffic under substantially similar circumstances
and conditions." An example of this is found in Wight v. United
States, where the defendant railroad charged different rates to two ship-
ners on movements of identical goods (beer) over the identical route. The
Court ruled the rates to be in violation of § 2, despite the railroad's claim
that the lower rate to one of the shippers was necessary to meet competi-
tion from another railroad.

Another section in the ICA dealing with discrimination is § 3(1), which
states:

It shall be unlawful for any common carrier . . . to make, give, or cause
any undue or unreasonable preference or advantage to any particular [car-
rier or commodity] . . . or to subject any particular [carrier or commodity] . . .
to any undue or unreasonable prejudice or disadvantage in any respect
whatsoever. . . .

Though § 3(1) does not contain the word "discrimination," it is the provi-
sion of the ICA with the broadest application to discrimination, there being
no need for the degree of similarity of conditions as required in § 2. Section 3 is also cited as the source for § 10741(b) in the revised version
of the ICA, which forbids common carriers from subjecting shippers to
"unreasonable discrimination." Read into the § 3(1) ban of undue pref-
erece or prejudice is a requirement that there exists some competitive
injury flowing from the rate structure. Because of its wider breadth of
application, § 3(1) discrimination will be the only type of discrimination

11. 167 U.S. 512 (1897).
12. But cf. Texas & Pacific Ry. v. ICC, 162 U.S. 197 (1896) where the Supreme Court al-
lowed two different rates on identical goods and routes in order to meet competition from foreign
water carriers.
15. 49 U.S.C.A. § 10741(b) (West Spec. Pamph. 1979). See also "Historical and Revision
Notes" accompanying § 10741, where it is stated that, "The words 'subject . . . to unreasonable
discrimination' are substituted for 'to make, give, or cause any undue or unreasonable prefer-
ece or advantage . . . to any undue or unreasonable prejudice or disadvantage,' . . . ." Id.
analyzed in this section. 16

Before going any further into the discrimination question, it is necessary to explore the definition of the very word “discrimination.” Prof. F.M. Scherer states:

No simple, all-inclusive definition of price discrimination is possible. But very tersely, price discrimination is the sale (or purchase) of different units of a good or service at price differentials not directly corresponding to differences in supply cost. 17

Bonbright puts it this way:

Among economists there would probably be general agreement that the practice of exacting different charges for different classes of service rendered at the same marginal costs constitutes discrimination, and equally general agreement that failure to impose higher charges for services rendered at markedly higher marginal costs is also discriminatory. 18

A comparison of rates alone, then, is an insufficient basis upon which to determine the existence of discrimination. The essence of discrimination is not inequality of rates, but inequalities in the relationships of rate to cost. The dollar mark-up from costs, however, does not seem an appropriate candidate as a measure of discrimination, for charging eleven dollars to ship something which costs the carrier ten dollars to handle seems discriminatorily high when compared to a rate of $101 for the shipment of something costing $100: Though both rates are one dollar above costs, it would be a ten percent markup as opposed to one percent. Let us therefore initially define discrimination as the charging of rates which are different percentages above cost. 19 Bonbright notes that this definition of discrimination, “[a]s a practical, first approximation . . . is probably more widely applicable than any proposed alternative.” 20

It should be noted that a finding of discriminatory rates should not necessarily lead to a finding of illegality, of “undue” preference, prejudice or discrimination. We shall see that discrimination can be justified by other “transportation conditions” such as the value of service or the exist-

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16. A third section of the ICA which relates to rate discrimination is § 4, which forbids charging a higher amount for shipping a good a shorter distance in a given direction, a particular type of locational discrimination. For example, if a railroad ships wheat from point A to point C, and B lies on the tracks somewhere in between, the railroad is prohibited by § 4 from charging a higher rate from B to C than A to C.
19. In our welfare analysis, nondiscriminatory prices for transportation services would be those with equal price-cost margins, (P-MC)/P, or equal price-cost ratios, P/MC.
20. Bonbright, supra note 18, at 375. Bonbright also puts forth the definition of discrimination discussed in the preceding paragraph; that is, of differences in price not equaling differences in costs, but notes that this definition “can be given only a very limited application and is quite inapplicable to the general design of a rate structure.” ld. at 377.
ence of carrier competition, or by other more general policy considerations. In our economic analysis, these were the demand characteristics which lead to differing price-cost ratios for various commodities, and the externalities which lead to adjustments in the results of the theoretical pricing rules.

The traditional rate discrimination test includes four steps. The Court in Chicago & E. Ill. R.R. v. United States gave a representative description to this test:

To support a finding of a violation of section 3(1), it must be shown (1) that there is a disparity in rates, (2) that the complaining party is competitively injured, actually or potentially, (3) that the carriers are the common source of both the allegedly prejudicial and preferential treatment, and (4) that the disparity in rates is not justified by transportation conditions.21

It is also commonly held that the burden of proving the first three components of undue preference and prejudice is on the complaining shipper, and that once met, the burden shifts to the carrier to justify the rate disparity.22 In essence, it is up to the shipper to establish the existence of discriminatory rates and injury from them, and then up to the carrier to show that the rates are not unduly discriminatory.23 Let us now look in more detail at the three crucial steps in the determination of illegal rate discrimination:24 (a) relative rate disparity, (b) competitive injury, and (c) justification of the discrimination.


23. See, New York v. United States, 331 U.S. 284, 305 (1947) ("Thus discrimination . . . [has been] established. But that is not the end of the matter. For 'mere discrimination does not render a rate illegal under § 3' [cite]. Section 3 condemns 'any undue or unreasonable preference or advantage' and 'any undue or unreasonable prejudice or disadvantage.' "') (emphasis added) See also Consideration and Control of Commercial Conditions in Railroad Rate Regulation, 40 YALE L.J. 600, 604 (1931) [hereinafter cited as Commercial Considerations].

24. The fourth step being that the carrier is the common source of preference and prejudice. See also D.P. Lockin, ECONOMICS OF TRANSPORTATION, chapters 18 & 22 (1972), for a good survey of discrimination and reasonableness and for discussions of many of the cases cited below.
RELATIVE RATE DISPARITY

The language of the first step of the § 3(1) test almost invariably refers to disparities in “rates.” This causes some concern since we have already shown that differences in rates without reference to costs are relatively meaningless. When we examine each case more closely, however, it becomes apparent that the Commission and courts are concerned with the ratio of rates to costs. Though the use of cost criteria to justify “rate” disparities is formally relegated to the fourth step, they are usually considered, at least in part, in the first step. For example, before “rates” are ordered down to levels not exceeding those for competing commodities, the similarity of cost factors are often noted. If costs are deemed equal, a measure of “rate” disparity also measures “ratio” disparity. Also, instead of making allegations on the basis of differences in rates, they are often made on the basis of differences in percentages of certain standard rate classes which already reflect cost.

To establish a § 3(1) claim, then, a complaining shipper must first prove the existence of “rate disparity.” It is typically not a showing of simple dollar-rate differences (unless costs are the same), however, but a showing of a difference of rates relative to the costs of providing the transportation service.

COMPETITIVE INJURY

The complaining shipper must then show that a competitive relationship exists with a relatively favored shipper or commodity, and that the shipper has been or might be injured in that relationship. Several factors

25. The court in the Harborlite case noted that a “mere difference in the rates . . . does not alone amount to a ‘disparity’ under § 3(1),” 613 F.2d at 1095, but that “‘[a] disparity, by definition, involves a difference in rates, distance and terminal costs considered,’ id. at 1096 (some emphasis added). The Harborlite court makes explicit the viewing of both rates and costs in the first step of the discrimination test, though it left certain cost factors such as volume and regularity of movements, curves and grades of the track and frequency of washouts and snows for the fourth step of justification. See id. at 1100-01.


27. See, e.g., Chicago Board of Trade v. Ill. Cent. R.R., 344 I.C.C. 818, 831 (1973), aff'd sub nom. Chic. & E. Ill. R.R., supra note 21. Noting that class rates were based primarily on distance, adjusted by terminal expenses, the ICC stated there that “docket No. 28300 comparisons are a valid measure to determine whether a disparity in rates exists . . . .” 344 I.C.C. at 832-33 (emphasis added), citing Cudahy Packing Co. v. Akron, C. & Y. R.R., 318 I.C.C. 229 (1962), aff’d sub nom. Alchison, T. & S.F. Ry., supra note 22, where percentage of first class rates were also used. Percentage of first class rates was also the standard of discrimination used in Continental Steel, and percentage of “maximum reasonable rates” was the standard in National Cottonseed Products Ass'n v. Atlanta, B. & C.R.R., 256 I.C.C. 89 (1943).
are used in the determination of competitiveness, including similarity of use, as well as the value and the physical properties of the commodities. The Commission does not, however, require that products be perfectly substitutable to compete.\textsuperscript{28}

Once competition is found, the complaining party must also establish some form of injury. There would seem to be a very close connection between proving competition and proving injury, since if competition exists there would automatically be someone to take advantage of, or be injured by, any rate disparity. While this connection has often been recognized by the ICC and courts,\textsuperscript{29} cases exist where no injury is found even though there exist both rate disparities and competition.\textsuperscript{30}

Other factors enter into the question of injury. A common type of evidence which has been offered is the effect that rates have had on the movement of the allegedly prejudiced commodity. The ICC has not, however, been consistent in dealing with this type of data.\textsuperscript{31} Additional considerations include the profit margin of the shipper, the intensity of competition faced by the shipper, and the dependence it has on transportation.\textsuperscript{32} By whatever means injury is proved, however, it has been held that it "need not be proved to the point of certainty."\textsuperscript{33}

It appears, then, that in general, proof of competition and rate disparity alone, unless the competition is especially intense, is insufficient as proof of injury. Many other factors must be weighed against each other, including the history of commodity movements and existence of other determining factors.

\textbf{JUSTIFICATION OF DISCRIMINATION}

Once discrimination is proven by a showing of rate disparity and

\textsuperscript{28} See Locklin, supra note 24, at 532-33.


\textsuperscript{30} See, e.g., Arvonia-Buckingham Slate Co. v. Aberdeen & R. R.R., 174 I.C.C. 767, 769 (1931) (where no injury was found even though the two commodities in question were competitive to the point of interchangeability and the choice between them "frequently" depended on their delivered priced).

\textsuperscript{31} For a discussion of the misuse of such data, see infra note 158 and accompanying text. For conflicting cases, see, e.g., National Cottonseed Products Assn., 256 I.C.C. at 93-94 (where injury was found from high rates when shipments decreased); Atchison, T. & S.F. Ry. v. United States, 218 F. Supp. at 371 (where injury was found although shipments increased); Bronstein v. Balt. & O. R.R., 215 I.C.C. 137, 141 (1936) (where no injury was found when shipments had not decreased); and New England Grain & Feed Council v. ICC, 598 F.2d 281, 286 (D.C. Cir. 1979) (where no injury was found although production had decreased).

\textsuperscript{32} Atchison, T. & S.F. Ry. v. United States, 218 F. Supp. at 370.

\textsuperscript{33} Harborlite, 613 F.2d at 1098.
competitive injury, the burden of proof shifts to the carrier to justify the discrimination. The court in *Harborlite v. ICC* stated that the burden the carriers bear includes justifying "the particular disparity existing," and not just proving that *some* disparity is justified. The justification is based upon "transportation conditions," under which falls many factors. It is at this step where the most interesting welfare implications arise, for it is here where the carriers and the ICC justify departures from purely cost-based pricing.

Some cost factors are still included within this step of justification. It was shown in the section on relative rate disparities that rates are typically considered side-by-side with costs in the initial step of the discrimination test either through a showing that costs are similar or through comparisons to class rates. Other elements of costs, however, also enter after the finding of discrimination. In a theoretical sense, it may seem a bit perplexing to use costs in the first step to establish disparities, and then again in the fourth step to justify those same disparities. The practicalities of the situation, however, may be the primary cause of this apparent discrepancy. First, the costs often considered in step one are very general in nature, such as those reflected in class rates, whereas those used at the justification stage are far more specific to the particular movements involved. This detailed cost information would most often be in the hands of the carriers, who also would generally have the capability to better understand the data. By allowing comparison of class-rate percentages to suffice for the proving of disparities, the burden of showing this detailed analysis is not placed upon the shipper (unless, of course, if the class-rate percentages do not show a disparity). Second, if competitive injury is not proved by the shipper, the detailed cost analysis would be avoided altogether. This splitting of costs may blur their dual purpose in determining discrimination (as defined by different price-cost ratios) and justifying discrimination, but if applied properly and specific types of costs are not used at both stages, the end results still should come down to whether or not deviations from purely cost-based pricing are justified.

Cost, however, is not all that is included in "transportation conditions." Demand factors exist which can justify deviations from cost, as

34. *Id.* at 1100.

35. The Commission in *California Walnut Growers Assn. v. Aberdeen & R. R.R.*, 50 I.C.C. 558, 561 (1918), lists several of the cost-connected factors, including type of car used, extra services required, containers in which the commodity is shipped, the commodity’s weight and susceptibility to damage, and the identification of who actually does the loading and unloading. Conditions in the terminals is another such factor. *Atchison, T. & S.F. Ry. v. United States*, 218 F. Supp. at 367. As was mentioned in note 25 above, volume and consistency of movements, the condition of the track and roadbed, and the weather are further cost factors which are considered at the fourth step. *Harborlite*, 613 F.2d at 1100-01.
was recognized very early on in *Boston Chamber of Commerce v. Lake Shore & M.S. R.R.*:

The element of cost of service which may at one period have been recognized as controlling in fixing rates has long ceased to be regarded as the sole or most important factor for that purpose. The value of the service with respect to the articles carried, the volume of business and the conditions and force of competition are justly considered to have controlling weight in determining the charges for transportation.\(^36\)

One of the factors listed is value of service. The general welfare notion, similar to our demand analysis in Section II above, is that the greater the value to the shipper, the greater portion of overhead costs that shipper should carry. One rough indicator of value of service is the value of the commodity itself, a standard used in many cases.\(^37\) Another type of evidence which might indicate the value of service, and so the willingness of shippers to pay higher rates, is a showing of whether or not quantities transported dropped as rail rates rose. The evidence here would be similar to the type introduced concerning the issue of injury.\(^38\)

Competition from other carriers is another factor listed in the *Boston Chamber of Commerce* case. This factor has been recognized in many other recent cases.\(^39\) This, too, can be viewed in terms of demand elasticities. The greater the competition from other carriers and commodities, the more elastic will be demand, thereby justifying lower rates.

One final source of justification not often used is a direct appeal to public policy. An example of this is competition between ports. Locklin states:

> The establishment of the "port differentials" was based on the rivalry of the various ports for the export grain business [and so not on costs]. Originally these differentials were made in order to equalize the in rate to the various

\(^36\) 1 I.C.R. 754, 760-61 (1888).

\(^37\) See Locklin, *supra* note 24, at 159-60. In Wrigley Co. v. Aberdeen & R. R.R., the Commission said: "The difference in value alone, in our opinion, justifies the higher ratings [and so rates]." 161 I.C.C. 41, 44 (1930). See also other cases cited in Locklin at 535, n.104.

\(^38\) Though note that if the shippers could too easily absorb this rate increase, a finding of competitive injury in step two would seem unlikely. See also the recognition of profit margins as a factor in Atchison, T. & S.F. Ry. v. United States, 218 F. Supp. at 370; and *Harborite*, 613 F.2d at 1096-97 (citing the *Atchison, T. & S.F. Ry.* case in its discussion of competitive injury). In a similar vein, note also the ICC's unwillingness to listen to complaints of the railroads that lowering rates to the allegedly prejudiced shippers would decrease railroad revenues: "A possible loss of carrier revenue is not a defense to the maintenance of unduly preferential and prejudicial rates . . . ." Brazos River Harbor Navigation District v. Abilene & S. Ry., 322 I.C.C. 529, 533 (1964), citing the *Cudahy Packing Co.* case. This argument and that of the willingness of shippers to pay high rates are actually closely related, for if the shippers were unwilling to pay higher rates, raising the rates would have decreased traffic greatly and so decreased total revenue. Lowering the rates, would, in fact, lead to increased revenues under those conditions.

ports with the out rates, i.e., the ocean rates from the port to European ports.\textsuperscript{40}

So the Commission in \textit{Boston Chamber of Commerce} equated the export traffic rates to Boston with those to New York, but did not do that for local traffic.\textsuperscript{41}

In sum, after a showing by complaining shippers of relative rate disparities and competitive injury, it is up to the carriers to show that any existing preference or prejudice is not undue, as explained by transportation conditions. Although costs were considered in the first step of the analysis, they are often considered again here, and at times the cost analysis for both steps may even merge into one. Once costs are determined, variances from purely cost-based pricing can be justified by evidence of such things as carrier competition, the value of service, or occasionally by direct reference to public policy.

\textbf{B. \textit{Reasonableness}}

It has been shown that a rate may be found illegally discriminatory in relation to the rate for a competitive commodity, shipper, or location. We shall now examine when a rate may be deemed unlawfully high or low in itself. Though no necessity exists in such a case for providing competitive injury, we shall see that the reasonableness of a rate is not considered in isolation from other rates.

The basic provision of the ICA which forbids unreasonable rates is § 1. Section 1(5) has traditionally stated that “[a]ll charges made . . . shall be just and reasonable.” Section 1(6) mandates “just and reasonable” rate classifications.\textsuperscript{42} The language in the updated version of the ICA reads: “A rate, classification, rule or practice related to transportation or service provided by a carrier . . . must be reasonable.”\textsuperscript{43}

\textit{Cost-Imposed Limits on Rates}

In Section II we noted that marginal costs are crucial in rate-making decisions. It was claimed that only when prices (or rates) equalled marginal costs was society’s welfare maximized. Nevertheless, any rate exceeding marginal cost, though decreasing welfare, would at least serve

\textsuperscript{40} Locklin, \textit{supra} note 24, at 84.

\textsuperscript{41} 1 I.C.R. at 761. The ICC in \textit{Chicago Board of Trade} was also concerned with export competition between Chicago and the Gulf ports. Another example of public policy entering directly into the rate-making process was in the early case of Howell v. N.Y., L.E. & W. R.R. The Commission there approved a uniform rate for shipments of milk to New York City for movements starting within 200 miles of the city, in part upon the recognized public interest in an adequate milk supply. 2 I.C.R. 162, 176 (1888).


\textsuperscript{43} 49 U.S.C.A. § 10701(a) (Supp. 1986).
the purpose of contributing to the recovery of fixed or overhead costs. For the firm to break even, all of these fixed costs must somehow be covered. One way to do this would be to spread these costs evenly over all commodities shipped. This is the notion incorporated into "fully allocated" or "fully distributed" costs. It was pointed out, however, that the uniform allocation of fixed costs would not lead to a maximum level of social welfare. In order to maximize welfare, price-cost ratios must vary according to demand factors. With some rates falling below fully allocated costs, however, there must also be rates which exceed fully allocated costs in order to have the firm break even.

The ICC has generally held that rates cannot reasonably fall below variable or out-of-pocket costs (approximating the economist's definition of marginal costs). Not only would the railroad sustain a loss in carrying a commodity at that rate, but the rates on other commodities would have to be increased in order to cover the extra loss. It is important that only the "variable" portions of cost be included within the definition of marginal cost to be used as a rate floor, and the more recent cases stress this:

Variable costs are the direct costs of labor, material, equipment, supervision, interest and the like incurred solely by the service rendered. They do not include constant costs, which are the expenses incurred on behalf of the operation as a whole, or such items as cost of capital.

The ICC also recognizes that for carrier viability, not only must many rates exceed marginal costs, but others must also exceed fully allo-

44. See supra text accompanying Figure 2.
45. Lumber Rates from the Southwest to Points North, 29 I.C.C. 1, 15 (1914). See also United States v. Chicago, M., St. P. & P. R.R., 294 U.S. 499, 506-07 (1935). Note that it is not clear how accurate an approximation out-of-pocket cost is of marginal cost. Bonbright notes that out-of-pocket costs "sometimes" underestimate marginal costs, leaving out "noncash costs (such as depreciation due to wear and tear of equipment) attributable to an increase in the rate of output." Bonbright, supra note 18, at 317 n.1. Friedlaender gives a more dismal view: "At most, ICC cost data can be used to describe general cost behavior of railroads . . . [, and] in no way should be used to assess the relative costs of a specific point-to-point commodity movement." Friedlaender, THE DILEMMA OF FREIGHT TRANSPORT REGULATION, 34 (1969). See also id., Appendix A, pp. 191-94.
47. The ICC has put it in these terms:
If a carrier were to limit all its rates to variable costs it would incur operating deficits, erode its capital and eventually starve itself to the point of financial extinction. . . . [I]t must make up other costs by increasing the burden on other traffic . . . . Thus, we could permit but we may not compel the respondents [railroads] to limit line-haul rates to variable costs.

Transit Charges on Soybeans at Points in the South, 351 I.C.C. at 377. See also in re Investigation & Suspension of Advances in Rates, 22 I.C.C. 604, 624 (1912); and Central of Georgia R.R.
cated costs.\textsuperscript{48} A rate which is above the lower limit may still therefore be found to be unreasonably low.\textsuperscript{49} It should be recalled at this point, however, that given the impact of demand factors, increasing rates does not always lead to increased revenues,\textsuperscript{50} and so would not always benefit the carrier.

\textit{JUSTIFICATION OF INDIVIDUAL RATES}

In a manner similar to that used in dealing with discrimination, the ICC first examines costs to establish a starting point for determining the reasonableness of a rate, and then looks to demand characteristics to justify deviations from cost. We will now briefly examine how the costs are determined by the ICC, and then look in more detail how deviations from costs are justified in a reasonableness analysis.

There are many elements to the cost of transporting a commodity.\textsuperscript{51} A detailed determination of costs, however, is not typically undertaken. As Locklin states:

\begin{quote}
Although cost allocations sometimes figure prominently in rate cases, there are hundreds of cases decided each year without any attempt to find the cost of service in the absolute sense of the word. The usual method of determining the reasonableness of rates on a particular commodity is to compare the rate with rates on commodities which have similar transportation characteristics . . . .
\end{quote}

Rate cases can be found by the thousands which illustrate the general rule that analogous articles should normally take the same rate.\textsuperscript{52}

As the Court of Appeals, D.C. Circuit, recently put it: "By the doctrine of 'relative unreasonableness,' the unreasonableness of a rate may be demonstrated by showing a significant disparity between that rate and a rate for substantially the same service in a comparable area."\textsuperscript{53}


\textsuperscript{48}. The Court of Appeals, D.C. Circuit, recognized this when it sustained the Commissioner's approval of a rate exceeding variable costs by 63 percent and fully allocated costs by 21 percent. Houston Lighting & Power Co. v. United States, 606 F.2d 1131, 1148 (D.C. Cir. 1979), \textit{cert. denied}, 100 S. Ct. 1019:

[This pricing scheme] is pertinent to the objective of providing an adequate overall level of earnings. If [the traffic involved here] is viewed in isolation it bears a heavy burden. Yet all shippers ultimately benefit when the rail carriers are able to generate revenues needed for survival.

\textit{Id.}


\textsuperscript{50} See supra note 38.

\textsuperscript{51} See Locklin, \textit{supra} note 24, at 426-33.

\textsuperscript{52} \textit{Id.} at 425.

\textsuperscript{53} New England Grain & Feed Council v. ICC, 598 F.2d 281, 284 (D.C. Cir. 1979). See also \textit{Commercial Considerations}, \textit{supra}, note 23, at 611-12; Aluminum Co. of America v. ICC,
In effect, then, this first cost-based step in testing for reasonableness relates closely to our original definition of discrimination, and the first step of the discrimination test: comparing the ratios of rates to costs.\textsuperscript{54} The next step of the analysis must then be to justify differences in these rates. Just as demand characteristics are used to justify differences in rate-cost ratios in discrimination cases, they are used for the same purpose in judging the reasonableness of rates. These demand justifications relate closely to notions of the value of service, sometimes put in terms of "what the traffic will bear."\textsuperscript{55} As we noted in the discrimination section, the value of the commodity shipped is often used as one measure of value of service.\textsuperscript{56} Also, evidence concerning history of movement of traffic is sometimes introduced to illustrate how well shippers of a commodity can bear the rate, though again this evidence is also not always controlling.\textsuperscript{56}

Besides demand considerations, public policy can sometimes be directly used to justify departures from purely cost-based pricing. While there are sometimes general references to "public needs" made,\textsuperscript{57} typically the public interest must be one in an effective transportation network and its overall role in stimulating the economy.\textsuperscript{58} In such cases where general non-transportation related policy issues are brought to the foreground, the ICC often defers the problem to Congress, claiming it beyond its own current authority to handle, and several commentators have stated that a change in policy must be Congressionally authorized. Sharfman writes:

If reforms . . . are sought, it is not obvious that the regulation of railroad rates is the best method of achieving them; and even if it were, administrative regulation along lines possessing such far-reaching implications should hardly

\textsuperscript{54} The court in the \textit{Aluminum Co. of America} case explicitly used ratios, supra note 75, as did the same court that year in \textit{Potomac Electric Power Co. v. United States}, 584 F.2d 1058, 1065 (D.C. Cir. 1978).

\textsuperscript{55} \textit{See}, e.g., \textit{National Assn. of Employing Lithographers v. Atchison, T. & S.F. Ry.}, 136 I.C.C. 201, 203-04 (1927), where the Commission stated that it had "uniformly held that where two commodities are similar except for a difference in value the difference in rates may and should be more than an amount just sufficient to provide insurance against loss or damage in transit." \textit{See also} Locklin, supra note 24, at 434-36 and cases cited therein.

\textsuperscript{56} \textit{Central of Ga. R.R.}, 379 F. Supp. at 979. \textit{See also} \textit{Darling & Co. v. Alton & S. R.R.}, 299 I.C.C. 393, 398 (1958), where the ICC refused to lower rates on fertilizer even though evidence had been introduced that traffic had dropped, noting that "there is no positive indication that any of that decline may be ascribed to the rates assailed."

\textsuperscript{57} \textit{See}, e.g., \textit{Baltimore & O. R.R. v. United States}, 345 U.S. at 150.

\textsuperscript{58} \textit{See} Locklin, supra note 24, at 445-447 for a good discussion of public policy justification.
be undertaken without statutory authorization.\textsuperscript{59}

Locklin summarizes the cases on public policy in the following manner:

The general conclusion to be drawn . . . is that although the Commission sometimes recognizes the economic and social effects of certain rates, it is on insecure ground if it modifies rates otherwise reasonable out of deference to these consequences. To give weight to considerations of welfare, economic policy, and the like would hardly be consistent with the statement of the Supreme Court that the standards set up by the Interstate Commerce Act are "transportation standards, not criteria of general welfare."\textsuperscript{60}

\section*{C. Summary of Traditional Standards}

We have now examined the standards for testing both the reasonableness and discriminatory nature of rates. A finding of one, however, does not preclude the other. The ICC has often found, for example, that reasonable rates are unduly discriminatory.\textsuperscript{61}

Both tests do have certain similarities. Though the Commission seldom puts it in these specific terms, their starting point in both tests typically is a comparison of rate-to-cost relationships. The final step for both is the justification of any rate (or ratio) disparity. This justification typically entails demand considerations, though direct appeals to public policy occasionally are made, and cost factors often have a way of re-entering the analysis as well.

Between the first and last step in a discrimination analysis comes the requirement of showing competitive injury, a step not necessary in a reasonableness analysis. This is because a discrimination analysis tends to focus much more specifically on the relation between the assailed rates and those for competitive commodities or locations. In the reasonableness analysis, the assailed rates can be compared to many more rates; all those with similar transportation characteristics. This distinction is due to the difference in the nature of the complainants' claims. Allegations of discrimination are relatively narrow; just that the movement of a commodity in a market is unduly hampered by a more favorable rate accorded a competing commodity. A claim of unreasonable nature brings in a wider spectrum of issues including the viability of the carrier system as a whole and not just specific effects on specific commodities. A system of reasonable rates should ensure a sufficient, though not excessive, amount of revenues to keep the railroads operating. Discrimination

\textsuperscript{59} Sharfman, supra note 14, at 521. See also Recent Cases, 101 U. Penn. L. Rev. 1226, 1231 (1953).

\textsuperscript{60} Locklin, supra note 24, at 447, quoting from Texas & Pac. Ry. v. United States, 289 U.S. 627, 638 (1933).

\textsuperscript{61} "[A] rate 'may be perfectly reasonable . . . and yet may create an unjust discrimination or an unreasonable preference . . .,'" Harborlite, 613 F.2d at 1091, quoting ICC v. Baltimore & O. R.R., 145 U.S. 263, 277 (1892).
against any specific commodity tends to be of smaller consequence to the carrier overall.

It is necessary then to compare these standards to the ICC to the pricing rules developed in Section II. In that more theoretical analysis, we started with price-cost ratios, and then set various prices above marginal costs based on elasticities of demand. Prices were allowed to rise to the relatively highest level for those commodities with the lowest demand elasticities (i.e. which were least sensitive to price changes), and overall prices were allowed to rise enough to cover the total cost of supplying all transportation services. 62

This seems to be very similar to what the ICC does when it justifies rate-cost relationships based on the ability to pay or the value of service in both discrimination and reasonableness cases. Though the exactness of numbers which appear in our theoretical analysis is not used, and confusion exists in the handling of movement data, the Commission still approaches the same end.

It is important to note, though, that the examination of the inelasticity of demand for shipping a commodity, or its ability to bear the burden of a rate, is typically viewed in isolation by the ICC. That is, inelasticity is used as a justification of a high rate, but relative inelasticity between commodities is not examined. In essence, the traditional standard states that commodities with low transport elasticities can be assigned high rates, whereas our theoretical standard would provide a greater continuum of choices: The lower the elasticity is, the higher the rate (relative to cost) can be. This shortcoming will be highlighted in the next section when we see how the ICC first applied traditional standards to the rates for recyclable and virgin materials.

The final element of the theoretical analysis was the adjustment of the cost and demand-based prices because of factors such as environmental externalities or some abstract notion of fairness. Consideration of these factors by the ICC, analogous to appeals to public policy, may, however, be limited by the scope of the authority given to it by Congress through enabling legislation. The complexities of dealing with this element are also brought out through an examination of the controversy over freight rates on recyclable and virgin materials.

We shall now, therefore, turn to the recyclable-virgin-material controversy. We will have to examine what Congress intended when it passed legislation dealing with the issue. As we shall see, Congress eventually did clearly switch the burden of proof to the carriers in the discrimination analysis, but did it act to change substantive law to allow non-traditional

62. Note that our simple theoretical analysis made no distinction between discriminatory rates and unreasonable ones.
considerations to enter into the ICC’s analysis? Or to limit consideration of certain traditional factors? It will also be important to examine how well and to what degree welfare considerations explicitly entered into Congress’ formulation of the Acts. The analysis of congressional intent to follow, along with our background in more traditional case law and in the theory of welfare pricing, will then be used to examine and evaluate the handling of the controversy by the ICC and courts.

IV. THE CASE OF RECYCLABLE AND VIRGIN MATERIALS

The previous section described how the ICC has generally dealt with questions of the legality of rates and rate structures. After identifying the related proceedings, this section first examines an initial attempt by Congress in 1973 to affect freight rates on recyclable materials. The poor reception given to it by the ICC is then discussed. An analysis of subsequent legislative, administrative and judicial action follows. It is found that a change in the traditional standards is initiated by Congress, due at least in part to environmental considerations, and then expanded upon by decisions of both the ICC and the District of Columbia Court of Appeals. The first ICC decision applies relatively traditional standards, though it makes the use of rate-cost ratios more explicit. It fails, however, to shift the burden of proof as called for by Congress, and creates exceedingly strict standards of competition. The second decision of the ICC continues to use rate-cost ratios but largely ignores demand considerations, apparently to satisfy the court’s reading of congressional intent.

This analysis of the controversy over rates on recyclable and virgin materials is important for several reasons. First, it highlights the inadequacies of traditional analysis in its general unwillingness to make pairwise comparisons of elasticities, and its inconsistent reading of evidence such as movement data. Second, this proceeding continues the trend, good from a welfare point of view, of explicitly using comparisons of rate-cost ratios instead of just rates. Finally, this case illustrates the potentially perverse effects which can be reached when trying to attain a specific goal if the welfare underpinnings of pricing are ignored.

A. OVERVIEW OF RELEVANT PROCEEDINGS

The problem of the possibly negative effect that rail rates can have on the movement of recyclable materials reached the United States Supreme Court in 1973 in the case of United States v. Students Challenging Regulatory Agency Procedures (SCRAP).63 A student group challenged the inclusion of recyclable rates in a general rate hike approved by the ICC on the theory that rail rates which discriminate against recyclables have a

deleterious environmental impact. Though recyclable rates were not ordered down, the Court held here that the students had made a sufficient allegation of injury upon which to base standing.

This issue was addressed by Congress in the same year when the Regional Rail Reorganization Act\(^64\) was passed. Section 603 of the "3-R Act" directed the ICC to "eliminate discrimination against the shipment of recyclable materials in rate structures . . ."\(^65\) Congress again dealt with the issue in § 204 of the Railroad Revitalization and Regulatory Reform Act of 1976 (the "Quad-R Act") which, in subsection (a), directs the ICC to investigate the rate structure for recyclable and virgin materials, place the burden of proof on the carriers to justify the rate structure, and remove any unreasonableness or unjust discrimination.\(^66\)

In response to § 204, the ICC faced the question of the relationship between rates on recyclables and on virgin material to Ex Parte 319, Investigation of Freight Rates for the Transportation of Recyclable and Recycled Materials.\(^67\) Major decisions in Ex Parte 319 were made in February of 1977 (Ex Parte 319-I)\(^68\) and April of 1979 (Ex Parte 319-II).\(^69\)

The appeal from the February 1977 order was heard in National Association of Recycling Industries v. I.C.C. (NARI-I),\(^70\) where the U.S. Court of Appeals sent the case back to the ICC. An appeal was also taken from the latter ICC order, and was decided by the same court in National Association of Recycling Industries v. ICC. (NARI-II).\(^71\)

### B. The Early 1970s

Prior to the passage of the 3-R Act, many congressional committees received testimony on recyclable freight rates. In 1971, the Joint Economic Committee heard allegations of discriminatory rates,\(^72\) as did sev-

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\(^{68}\) 356 I.C.C. 114 (1977).
\(^{69}\) 361 I.C.C. 238 (1979).
\(^{72}\) The Economics of Recycling Waste Materials: Hearings Before the Subcomm. on Fiscal
eral other House and Senate Committees. Similar claims were made in 1973, and a federal Environmental Protection Agency [EPA] official testified to the existence of probable discrimination, based on differing rate-to-cost relationships. The Chairs of the Federal Maritime Commission [FMC] and the ICC, however, testified that any comprehensive study of rates would take excessive amount of time, and that existing laws were already sufficient to handle the allegations of illegal rates. Senator Frank Moss, an early proponent of instituting an investigation, testified that he felt that discrimination against recyclables existed, stating, “Although the Interstate Commerce Commission has authority to review freight rates to assure nondiscrimination between competing products, it has not chosen to [d]o so with respect to recycled materials.”

From this background, § 603 of the 3-R Act was developed. In its final form it reads:

The [ICC] shall, by expedited proceedings, adopt appropriate rules under the [ICA] which will eliminate discrimination against the shipment of recyclable materials in rate structures and in other Commission practices where such discrimination exists.

Though § 603 certainly showed concern by Congress in the question of freight rates for recyclables, gone from earlier Senate versions were shifted burdens of proof, investigations of rate structures, presumptions of competitiveness, civil penalties, and any policy statement asking for “lowest possible lawful rates.” Congress here asked only for the expedited adoption of “appropriate rules” to eliminate discrimination.

The ICC quickly took up the issue posed by the 3-R Act. Rules were proposed in February of that year, 1973, and the final order was out in

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Policy of the Joint Economic Comm., 92d Cong., 1st Sess. 5, 10-61, 118, 120 (Nov. 8, 1971) [hereafter cited as The Economics of Recycling].


75. Id. at 108.
76. Id. at 102, 105.
77. Id. at 105.
78. The Economics of Recycling, supra note 72, at 5.
July in Ex Parte 306, Implementation of Public Law 93-236—Freight Rates for Recyclables. The terse seven paragraph order merely laid out a fairly standard procedure for the filing and handling of complaints alleging discrimination against recyclable materials. It defined discrimination as:

encompass[ing], but not . . . limited to, situations in which carriers charge different rates and/or charges for substantially similar transportation services on recyclable materials which are competitive, in whole or in part, with virgin natural resource materials.

It went on to say that the "discrimination" referred to in the 3-R Act would be presumed to be the same as the "unjust discrimination" barred by § 2 of the ICA. It would be up to the complaining party to show otherwise. It will be recalled that the discrimination of § 2 is very narrowly defined, pertaining to "like and contemporaneous service" for transporting "like kind of traffic under substantially similar circumstances and conditions." It is interesting to note here that the Commission was not setting up a rebuttable presumption of fact (e.g. discrimination or no discrimination) but of procedure—of which standard to use to determine fact.

Many adverse comments on the proposed rules (which were nearly identical to the final order) were made, but the ICC rejected all of these arguments. As to its definition of discrimination, it chose not to go beyond § 2 of the ICA since it was thought that the 3-R Act did not authorize it to do so. In ambiguous language, the Commission seemed to reject the broader § 3 discrimination, and nowhere made mention of § 1 reasonableness. The ICC also turned down suggestions of investigations or rebuttable presumptions of competition by noting that such provisions in the Senate version were not included in the final act, and so concluded that it was not Congress' wish to have those aspects required.

The Commission did not consider, however, that it had yet completely fulfilled its obligations under § 603, stating that it believed that the order was "a positive step toward implementation of the requirements of section 603." It is not apparent, however, how it would complete the implementation other than by simply hearing and adjudicating complaints.

There were two dissenting Commissioners; only one with a written

82. Id. at 416.
83. See supra text accompanying notes 10, 11, and 12.
85. An example of the ICC's ambiguousness: "We read section 603 to comprehend prohibitions against discrimination contained in the act as it is not written," 346 I.C.C. at 412.
86. Id. at 411-13. See, id. at 410-11 for comments on investigations and rebuttable presumptions.
87. Id. at 413.
opinion. Commissioner O'Neal felt the role chosen by the ICC was "too passive," and that the passage of § 603 "suggests to me that Congress wanted the Commission to do something more than merely reaffirm that upon the filing of a formal complaint a remedy for discrimination exists at the ICC." A broad investigation of the rate structure was the one of "several other courses of action . . . open to the Commission" that O'Neal proposed. 88

Responding to § 603 of the 3-R Act, though, the ICC simply set up a procedure to hear discrimination complaints. In effect, the ICC said that authority already existed in the ICA to remedy the situation, and that it was willing to hear relevant complaints to be judged under traditional (or stricter than traditional?) standards. Congress therefore accomplished very little, if anything, by the enactment of § 603. This may have been due, however, to the relatively weak language it chose to use in the statute.

C. THE QUAD-R ACT OF 1976

The enactment of § 603 of the 3-R Act did not quiet the proponents of further legislation on recyclable rates. Even before the ICC had a chance to respond to § 603, new bills were being proposed and old bills reconsidered. Perhaps these advocates foresaw that stronger language would be necessary to further what they saw congressional goals to be. All of this activity led to the passage of § 204 of the Quad-R Act. 89

It did not take long for the Quad-R Act to make it through Congress. The originating bill was first reported from committee on November 26, 1975, and was signed into law on February 5, 1976. No hearings were held regarding recyclable rates during the consideration of this particular piece of legislation, but as Senator Hartke stated, "This bill represents the culmination of literally years of work . . . ." 90

Section 204(a) of the Act had its roots in § 105 of Senate Bill 2718. 91 Both versions had five subsections, the first of which is the most important for our purposes.

The final version of subsection (a) of the Act required the ICC to (1) conduct an investigation to determine the legality of rates, (2) place the burden of proof to show the lawfulness of the rates, during the public hearing to be held, upon the carriers, 92 (3) issue orders correcting any

88. Id. at 414.
89. See Janis (1980), supra note 80, at 59-62 for discussion of congressional debate between Acts.
92. Subsection (2), which was not in the original Senate version, came about as an amendment on the floor of the Senate proposed by Senator Tunney. In offering the amendment, Tunney .
illegals, and (4) report annually to the President and Congress on its progress.\textsuperscript{93}

Subsection (b) provided for intervention by the EPA. Subsection (c) called for a research, development and demonstration program in the processing, handling and transporting of recyclable materials. Subsection (d) placed ICC orders in this matter subject to judicial review and enforcement. The final subsection, (e), gave definitions of recyclable and virgin materials.

It is important to note the goal attributed to this section by the Senate Commerce Committee. They stated that “it is the intent of the Committee that, consistent with the existing rules of rate-making, there be no unlawful impediments to the movement of recycled and scrap material.”\textsuperscript{94} (emphasis added) The Committee made clear its intent to encourage the use of recycled materials.

Before we try to assess the intent and meaning of § 204, it will be useful to examine how Congress had dealt with a similar situation in the 1920s, and how the Commission and courts read Congress’ actions then. In 1925, Congress passed the Hoch-Smith Resolution\textsuperscript{95} in an apparent attempt to lower rail freight rates on products of the then depressed agricultural industry.

Throughout its legislative history,\textsuperscript{96} the resolution was seen by the legislators as a general means to aid those industries suffering from depressed times, and as a specific means to aid agriculture. Congress expressed his belief that discrimination against recyclables existed, and that significant gains could be made in saving energy and the environment by rectifying the situation. He continued: “[W]hat my amendment simply does is to require that the [ICC] review the situation and that the railroads assume a burden of proof to demonstrate the just, reasonable, nondiscriminatory nature of their own rate structure.” 121 Cong. Rec. 38450 (Dec. 4, 1975). \textit{See also} Senator Hartke’s comments: “In substance what this [amendment] does is shift the burden of proof on the investigation of rates for recyclables for railroads from the present situation where it is in the hands of the claimants and makes the railroads prove that as far as their rates are concerned they are just and reasonable.” \textit{Id.} at 38451.

\textsuperscript{93} Another difference between § 204 of the Act and several prior proposals is that besides investigating the current rate structure, the ICC was also directed to investigate “the manner in which that rate structure has been affected by successive general rate increase . . . .” This was most likely in response to arguments that discrimination between two rates is exaggerated (in dollar terms) by uniform percentage increases in both rates. \textit{See, e.g.}, Senator Moss’s comment that percentage increases “aggravat[e] and increase the discrimination already firmly imbedded in the basic rate structure.” 119 Cong. Rec. 40724 (Dec. 11, 1973).

This question was also discussed at the time of the Hoch-Smith Resolution. \textit{See, e.g.}, \textit{H. Rept. No.} 735, 68th Cong., 1st Sess. 2 (May 13, 1924) and comments at 65 Cong. Rec. 11019, 11023 (June 6, 1924).

\textsuperscript{94} \textit{S. Rept.} 94-499, \textit{supra} note 91, at 51 (emphasis added).

\textsuperscript{95} S.J. Res. 107, 43 Stat. 801 and 802 (Jan. 30, 1925).

\textsuperscript{96} For a summary of the legislative history of the Hoch-Smith Resolution and of the Ann Arbor R.R. case, see Janis (1980), \textit{supra} note 80, at 64-69.
chose, however, to leave the specific task of correcting rates to the ICC. Though there were differing opinions expressed as to how low agricultural rates would be allowed to go, it seems clear that the consensus of Congress was that the existing rates were too high, and that the ICC should correct the situation. Though stronger language was possible, Congress was fairly direct in calling for "the lowest possible lawful rates."

The Hoch-Smith Resolution was challenged in a case dealing with the shipment of deciduous fruits from California to eastern points. Though the ICC had found these same rates to be lawful in a proceeding two years earlier, it held in 1927 that they were unlawfully high. The district court upheld the Commission's finding, but the Supreme Court reversed it in Ann Arbor R.R. v. United States.

The Court found that the ICC had relied upon the resolution in its decision, and that the Commission felt the resolution had effected a change "in basic law." The Court, however, noting that the resolution called only for "lawful changes" in rates, held that its provisions did "not purport to make any change in the existing law, but on the contrary requires that the law be given effect," and that the resolution's call for "the lowest possible lawful rates" was "more in the nature of a hopeful characterization of an object deemed desirable . . . ." The Court here never faced the question of whether or not Congress simply meant that within any lawful zone of reasonableness, the ICC should choose the lowest rate. Rather, it held that the resolution did not "make unlawful any rate which under the existing law is a lawful rate." Nor did the Court ever mention any significance in the fact that they were dealing with a joint resolution and not a fully enacted law.

In summary, even though Congress asked the ICC in very specific language to set the "lowest possible lawful rates" for the movement of a particular group of commodities, the Supreme Court held that the resolution "work[ed] no substantial change in the meaning or operation . . . of the existing law." In this light, let us now go back and interpret the congressional mandate behind the enactment of § 204 of the Quad-R Act

98. Id. 129 I.C.C. 25 (1927).
100. 281 U.S. 658 (1930).
101. Id. at 665.
102. Id. at 666.
104. 281 U.S. at 669.
of 1976. Was Congress merely making a "hopeful characterization of an object deemed desirable," or was it saying something more?

At first blush, it appears that Congress acted to aid a particular industry in much the same fashion as it had in 1925. Just as with the Hoch-Smith experience, there was a general feeling that rates had gone awry.\textsuperscript{105} Also as with Hoch-Smith, there were indications that Congress intended there to be no change in substantive law. Proponents spoke only of ridding the system of existing discrimination.\textsuperscript{106} Only traditional terms such as "reasonableness" and "unjust discrimination" were used in § 204.\textsuperscript{107} A significant change in traditional standards, though, was that existing rates would be presumed unlawful, leaving it to the carriers to prove otherwise.

It is interesting to note that the Hoch-Smith Resolution was not forgotten by the more recent Congress. In its historical review of the regulation of railroads, the Senate Commerce Committee did make mention of the resolution (though it made no reference of its fate in the Ann Arbor R.R. case).\textsuperscript{108} It should also be noted that the language of several of the earlier proposals was almost identical to that of the third paragraph of the Hoch-Smith Resolution.\textsuperscript{109}

From all of this, should it be concluded that § 204 of the Quad-R Act of 1976 was meant to accomplish, and would be interpreted as accomplishing, nothing more than the Hoch-Smith Resolution of 1925? There are several differences that would seem to lead to a negative response. First, § 204 calls for direct inclusion of environmental considerations by specifically requiring participation of the Administrator of the EPA and compliance with NEPA, highlighting a change that had occurred in background environmental legislation since the 1920s. Second, § 204 mandates an important change in decision-making procedure by specifically

\textsuperscript{105} Senator Tunney stated that he believed that the ICC had "allowed a situation to develop which gives a substantial freight rate preference to virgin ores . . . ." and that there was "discrimination, substantial discrimination, against recyclable materials." He went on to say that the ICC "allowed [that discrimination] to develop and it is up to them now to eliminate it." 121 Cong. Rec. 38450-51. In a similar vein, Senator Moss, commenting on his views on whether or not the current rates discriminated against recyclables, stated: "[T]hey certainly appear that way to me." 94th Cong., 2d Sess., 122 Cong. Rec. 1340 (Jan. 28, 1976).

\textsuperscript{106} See supra note 92.

\textsuperscript{107} Further support for the following existing standards can also be found in the Senate Commerce Committee’s section-by-section analysis of S. 2718 when they stated that "consistent with the existing rules of rate-making, there be no unlawful impediments" to recyclable traffic, S. Rept. 94-99, supra note 91, at 51 (emphasis added). It should be noted, however, that the amendment shifting the burden of proof to the carriers came after this Senate report.

\textsuperscript{108} Id. at 13.

placing the burden of justifying the rates on the carriers. Third, though the Supreme Court in the Ann Arbor case never dealt with this distinction (and so may have had little or no effect on its interpretation), § 204 has been fully enacted into law instead of merely being a part of a joint resolution.

Congress chose not to use the strongest language it could have, leaving out, for example, any provision specifically defining presumptions of competition. It did not use the seemingly stronger language of earlier proposals or of the Hoch-Smith Resolution itself calling for the "lowest possible lawful rates." Yet it appears that it did accomplish more than it had in 1925. By force of law, Congress was now calling upon the ICC to follow a new procedural rule presuming the unlawfulness of current rates, with NEPA and the EPA in the background, which could well lead to a substantial change in the result, though applying otherwise unchanged substantive law. Let us therefore turn to an examination of what the ICC did to implement § 204, and how the courts read both the congressional mandate and the ICC's response.

D. Ex Parte 319-I

Through § 204 of the Quad-R Act, the ICC was called upon to hold hearings to consider the legality of the recyclable rate structure, and was given twelve months to accomplish this. Extensive testimony was taken in the Ex Parte 319-I proceedings. Three weeks of hearings were held, and 95 verified statements and numerous briefs were submitted. All in all, the record consists of about 13,000 pages.

The parties tended to fall into two groups. One side consisted of shipper trade associations whose members dealt in recyclable commodities, and several shippers which used large quantities of the recyclables, such as non-integrated steel companies and some paper companies. They in large part argued that virgin and recyclable commodities competed, both as inputs and through the final products they produced, that the quantities of recyclables shipped were highly dependent on the freight rates, that freight rates discriminated against the recyclable materials and were unreasonably high, that the situation was aggravated by percentage general increases, and that the rates were not justified by cost and demand considerations. Perhaps, as well, rates should be tilted to favor recyclables because of the energy and environmental benefits to be reaped.

110. 356 I.C.C. at 117.
111. Some potential environmental injuries include the following: increased accumulations of non-recycled "junk," despoiling the landscape and taking up valuable space in sanitary landfills; increased mining activities which do their share in damaging the environment and depleting non-renewable mineral resources; and increased consumption of energy by encouraging the use of the more energy-intensive technologies necessary to convert virgin materials into useful prod-
On the other side were the respondent railroads, who were supported by certain shippers which depended greatly upon and had large ownership interests in virgin materials, such as integrated steel companies and a paper-making trade group. Their basic arguments were that virgin and recyclable materials were not competitive, competition between outputs being insufficient and irrelevant, that shipments of recyclable materials were not significantly dependent upon or deterred by increases in their transport rates, and that rate differences were justified by costs and other transportation characteristics.

One interest did exist which fell between the two above groups. This was the aluminum producers, consumers of large quantities of both recyclable and virgin materials. They argued that, because of non-interchangeability, no competition between virgin and recyclable materials existed (and so no discrimination was present), but that the rates on aluminum scrap were nevertheless unreasonably high.\(^\text{112}\)

The final decision and order of Ex Parte 319-I opened with a discussion of the controversy and of the seven categories of evidence called for as they applied to all of the commodities in general.\(^\text{113}\) It then briefly laid out some ground rules for judging reasonableness and discrimination,\(^\text{114}\) and launched into a commodity-by-commodity analysis.\(^\text{115}\) A short summary and presentation of ultimate findings followed.\(^\text{116}\)

**DISCRIMINATION**

Unlike their response to the 3-R Act,\(^\text{117}\) the ICC chose to consider discrimination in the § 3(1) sense, and to apply what they termed a ""traditional"" four-step approach, which was based on: (1) whether there was a disparity in revenue- (or ""rate""-) to-variable cost ratios, (2) if so, whether there was competition ""in fact"" [emphasis theirs], (3) if so, whether recyclable shippers were thereby injured, and (4) if so, whether the ratio disparities could be justified by transportation characteristics.\(^\text{118}\) It will be

\(^\text{112}\) One might speculate that because aluminum producers use significant quantities of both virgin and recyclable materials, they would have an interest in keeping both rates as low as possible. This is different from the other groups who would be more concerned about keeping their one rate down.

\(^\text{113}\) 356 I.C.C. at 116-56.

\(^\text{114}\) Id. at 156-60.

\(^\text{115}\) Id. at 160-427.

\(^\text{116}\) Id. at 427-31.


\(^\text{118}\) 356 I.C.C. at 159.
recalled that in our earlier discussion of the case law, we also referred to
the established four-step test of discrimination: (1) whether there was a
disparity in rates, (2) whether there was competitive injury, actually or po-
tentially, (3) whether the carriers were the common source of the rates
causing the alleged problem, and (4) whether the disparity in rates could
be justified by transportation characteristics.\footnote{119}

There are three basic changes the ICC made to the earlier test. First,
the ICC chose to deal with disparities in \textit{ratios} instead of in \textit{rates}. Second,
the Commission was concerned with competition in fact rather than
actual or \textit{potential} competitive injury. Third, it dropped the requirement of
having a common source of rates. The ICC set out the earlier test in a
footnote, citing it to the ICC decision which was affirmed in \textit{Chicago \& E.
Ill. R.R.}, and recognized two of its changes.\footnote{120} It first attributed its use of
ratios to the scope of its investigation in order to avoid reference to the
multitude of specific rates. It secondly recognized that the common-
source requirement of the earlier test was automatically met since the re-
spondents included all railroads. The Commission also pointed out that,
unlike the traditional standards, the burden here fell entirely on the rail-
roads to prove rate legality. It failed, however, to explain why it chose to
use the more stringent requirement of competition in fact.

In qualifying its four-part test further, the ICC said that it would "\textit{heed
the expressed intent of Congress,}"\footnote{121} which showed concern that "\textit{the
Commission may not be taking into account the full competitive relation-
ship between recyclable \ldots and virgin materials \ldots .}"\footnote{122} The ICC also
stated that when dealing with competitive injury, the historical trend of
shipments would be the "\textit{significant data}" used to determine whether
freight rates had discouraged recyclable shipments and encouraged vir-
gin material shipments. Questions of justifications of disparities in ratios
and of the environment would be considered in the commodity-by-com-
modity analysis.\footnote{123} The Commission also pointed out that the "\textit{main-
tenance of adequate revenue levels for railroads}" (as required by § 205 of
the Quad-R Act) would have to be considered in all the rate decisions.\footnote{124}
Let us now, however, examine how the ICC applied its four-step test of
discrimination to the evidence.

The first step of the test was whether the ratio of freight rate to vari-
able costs was greater for virgin or recyclable materials. If that ratio were
higher for the virgin material, the conclusion immediately followed that no

\footnote{119}. \textit{See} quote from \textit{Chicago \& E. Ill. R.R.} and text accompanying note 21, \textit{supra}.  
\footnote{120}. 356 I.C.C. at 159 n.23.  
\footnote{121}. \textit{id.} at 159.  
\footnote{122}. \textit{id.}, quoting \textit{S. Rep. 94-499, supra} note 91, at 47.  
\footnote{123}. 356 I.C.C. at 160.  
\footnote{124}. \textit{id.}
discrimination existed, regardless of whether or not the recyclable rate were higher. If the recyclable ratio were higher, the ICC proceeded to the second step of the test.

The second step, competition in fact, was hotly contested. It was typically decided in terms of interchangeability of virgin and recyclable materials, and supplemented by historical evidence of recyclable commodity movements and by their relation to sales of the final product. The narrowness of the Commission’s definition of competition can perhaps best be seen in cases where the materials were technologically interchangeable (though direct substitution was not observed in practice), but found not to compete. It might seem that these cases would at least fall within “potential” competition, if not competition in fact, though the ICC often classified these relationships as “complementary” instead. The Commission also refused to impute competition between inputs, such as iron ore and ferrous scrap, from competition between outputs made from different technologies, such as finished steel from integrated and nonintegrated steel mills.

If ratios were unfavorable to recyclable materials and if competition existed, or was assumed to exist for the sake of argument, the issue of injury to recyclable shippers became crucial to the question of unlawful rate discrimination. Having refused to accept the estimates of freight rate elasticities of a study submitted by the railroads, the principal evidence

125. See, e.g., id. at 186, 382.
126. For example, no competition was found between iron ore and scrap iron and steel in spite of the range of input mixes possible in the various steel-making technologies. Id. at 188-89. The ICC also accepted the fact that aluminum scrap could be substituted for virgin ingot, and that glass cullet could be substituted for industrial sand, but found that they were not in fact competitive because it would be “difficult and uneconomical” to substitute, id. at 268 (aluminum scrap), or because “its economic feasibility has not been established.” Id. at 395 (glass cullet). Also, it refused to consider certain nonferrous scrap to be competitive with copper ore because the ore must first undergo a concentration process which the scrap did not. Id. at 296.
127. See, e.g., id. at 267, 344.
128. Id. at 204: The ICC here gave no basis for this decision, other than that it had “studied and analyzed [the record] as carefully as possible.”
129. See, e.g., the ICC’s discussion of ferrous scrap where, after holding that no competition existed, stated: “However, viewed realistically, we are certain that this finding [of non-competitiveness] will not end the controversy. Accordingly, the following discussion is based on the premise that iron ore and scrap iron and steel compete.” Id. at 204. See also id. at 345.
130. The study was done by W. Bruce Allen and James R. Nelson of Gellman Research Associates [hereinafter referred to as the Gellman study]. The study gave arguments as to why most of the recyclable and virgin materials did not compete with each other, and empirical estimations of many of the freight rate elasticities for recyclables, alleging them to be inelastic. A freight rate elasticity shows the percentage change in quantity shipped caused by a percentage change in the transport rate. No such estimates were given for virgin materials in the Gellman study. The ICC, however, refused to accept these elasticity estimates because they were too inexact to be useful, citing, for example, their short-term nature, the high level of commodity aggregation, and the ignoring of intermodal competition. 356 I.C.C. at 149-51.
used was showings that the quantities of recyclables shipped either increased over time, or were highly correlated with the sales of the final product. The conclusion was therefore reached that increasing rail rates had little or no effect on recyclable traffic.

If disparate rates were found to cause competitive injury, transportation characteristics could be used to justify the rates. Though competitive injury was never explicitly found, the ICC did occasionally examine these justifications. As earlier noted, both cost and demand factors are traditionally used to justify rate disparities. When ratios of rates to costs (as opposed to just rates) are to be justified, presumably the costs should already have been included in the first step. Even though the ICC considered many cost factors to be "transportation characteristics," it made an attempt to include them within their estimates of variable costs. Costs still were occasionally discussed separately as justifications. If all cost factors were, however, handled in step one, then only demand factors such as the value of service, value of commodity, and intermodal competition remained to justify ratio differences.

In order to estimate these demand factors, evidence such as how large rates were relative to delivered price, and comparisons of delivered prices were used to justify higher ratios for recyclables. Also used to justify a low rate for virgin copper ore was the threat of diversion to private carriage. Loss of recyclable traffic to other modes, however, was not used to justify their lower rates, such as when the ICC felt that trucks often dominated the movement of wastepaper because of the short distance hauled and of textile wastes because of the quickness of motor transport. The Commission seemed unwilling to find that lower rail rates would increase rail traffic of these commodities.

Reasonableness

With none of the rates investigated found to be unlawfully discriminatory, the question of legality rested on their reasonableness. The relation-

131. See, e.g., 356 I.C.C. at 205, 269, 351.
132. See, e.g., id. at 204.
133. See infra note 158 and accompanying text as to some shortcomings of this type of data.
134. See supra text accompanying notes 34-39.
136. See, e.g., id. at 137, 243, 255.
137. See, e.g., id. at 349-50.
138. See, e.g., id. at 243.
139. See, e.g., id. at 206, 349.
140. See, e.g., id. at 268, 297.
141. Id. at 297.
142. See, e.g., id. at 351, 383.
ship of recyclables to virgin materials was no longer at issue here, since
competition is not a prerequisite for unreasonableness.

The ICC singled out two types of evidence as "the best indicators of
reasonableness": the historical trend of recyclable shipments, and the
comparison of freight rates on recyclables to their delivered prices. It
then stated that it was "especially concerned" about situations with high
rate-to-variable cost ratios, and when those ratios varied widely between
territories and between similar types of recyclables. 143 The suggestion
of a maximum rate-cost ratio equalling the national average of 131.8 percent
was ruled out, noting that a public interest in viable railroads existed as
well as a public interest in recycling. 144

The consideration of the reasonableness of individual rates seemed
somewhat unsystematic. As was stated at the outset, the relationship of
quantities shipped to transportation rates was an important consideration
throughout, and was typically used to demonstrate that the quantity of
recyclable traffic was related far more to the output of final products than
to transport rates. 145 The ratio of freight rate to value of the commodity did
not seem to play as great a role. For example, it was noted that the
freight rate on scrap iron and steel may be "significant," but the high
rates on them were reasonable nevertheless. 146

Great weight was often attached to the rate-to-variable cost ratios,
but no sharp cut-off between legal and illegal rates was evident. "Legal"
ratios ranged up to 226 percent, 147 and "unlawful" ratios down to 183
percent, 148 with little support given to many of their decisions. 149 Even
when rates were held to be unreasonably high, there often appeared to

143. Id. at 157.
144. Id. at 157-58.
145. See, e.g., id. at 184, 331, 414.
146. Id. at 184.
147. Id. at 333.
148. Id. at 272.
149. For example, a 189% ratio on the recyclable copper matte was held lawful even though
"no data has been provided as to the value of the commodity or the amount of tonnage moving
annually over a period of years," and noting it "therefore difficult to determine if the commodity
can bear this ratio and still move." Id. at 299. It should be noted that the probable revenue
impact would have been minimal. Though no revenue figures were given for the affected region,
the ICC reported that for three western railroads with similar quantities of carloads shipped, the
revenue from "copper matte, etc." ranged from 0.010 to 0.032 of a percent of their total reve-
nue. Id. at 293. A ratio of 177% was also deemed within an undefined "zone of reasonableness,"
and ratios of 184% and 161% to be less than a level of "maximum reasonableness." Id.
149. at 271. The Commission went to the extent of allowing seemingly non-compensatory ratios of
55, 64 and 69% on returnable bottles, stating that these rates were "not above the maximum
level of reasonableness!!" Id. at 424. The Commission noted that the Southern carriers had
indicated that some bottles were returned free. Id. at 424. This could in part explain these low
ratios, but the Commission made no other comment.
be no pattern to the amounts of ordered reductions. Far too often, conclusions were apparently made on little or no evidence.

**CONCLUSIONS AND ULTIMATE FINDINGS OF THE ICC**

As to all commodities, the Commission found either no competition or no injury. It therefore held all rates to be nondiscriminatory.

Several rates were found to be unreasonably high, and percentage reductions ranging from 5 to 20 percent were ordered. According to the Commission, these reductions were based on "all the evidence of record including the revenue-cost ratio, the value of the commodity, and the financial impact of the reduction on the railroad respondents."  

Though much weight was put on rate-to-variable cost ratios, the Commission tried to downplay their role. The final paragraph of the decision spoke to this point:

In closing, we would like to emphasize that the ratio of revenue to variable cost resulting from the reductions ordered herein are not to be construed, in and of themselves, as standards of maximum reasonableness. We have ordered reductions not based simply on the ratios, but based on consideration of all evidence of record, in light of the special character of this investigation under the 4R Act and the statutorily imposed burden of proof on the railroads. We have continually rejected the notion that we should declare a particular revenue to cost ratio to be the sole criterion for determining maximum reasonableness [citations omitted]. The ratios were a useful and appropriate tool in this investigation; however, their value does not extend beyond their use in making the considered determinations and ordering relief herein.  

It should be noted, however, that the Commission in Ex Parte 319-I was to establish a level of maximum reasonableness solely on these very ratios.

Three commissioners dissented from the Ex Parte 319-I decision. Commissioner Christian, joined by O'Neil, felt that the decision failed to comply with § 204 of the Quad-R Act. They thought that the burden of

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150. Reductions of 20% were ordered for ratios of 210, 213, 214, 319 and 343%; 15% reductions on ratios of 272 and 431%; 10% reductions on ratios of 183 and 237%; and 5% reductions on ratios of 193, 198, 210 and 227%. The 15% reduction on the ratio of 431%, for example, would bring the figure down to 366% (= 431 x 0.85), still higher than any of the others before reduction. Comparisons to other territories were occasionally made to justify a finding of unreasonableness, see, e.g., id at 333-34, or because of high freight rates relative to low value, see, e.g., id at 394-96, but unfortunately that was not the standard case.

151. Id at 429. There were also several commodities for which the ICC found that insufficient evidence had been submitted upon which to base a decision of legality (regardless of the burden of proof). Rather than order rate reductions, the ICC chose to order further investigations into them. Id at 431.

152. Id at 430 (emphasis added).

153. See text accompanying notes 207-216 infra, and 361 I.C.C. at 244.
proof had not adequately shifted to the railroads. All three dissenters also said that the decision used the issues of competition and injury to avoid confronting the task of justifying rate disparities.154

**ANALYSIS OF THE DECISION**

The ICC made little reference to the intent of Congress behind the passage of § 204 of the Quad-R Act. It was noted that Congress required a shifting of the burden of proof, but the Commission seemed to ignore this. The most frequent occurrences of this appeared when it stated that the carriers failed to prove some element of lawfulness, but then held that the rate was lawful regardless.155 It seems that the burden of proof, if shifted to the carriers, might be a very difficult one to carry, for it is generally easier to prove the existence of something than the lack thereof. Whereas a shipper might be able to establish injury, subject to rebuttal, by a showing of fierce competition, a precarious profit level, or a loss in sales, a carrier faced with the burden of proving no injury would seem to have to deal with all of those issues. If the carriers failed to carry this burden of proof, the ICC would then have to set new rates, presumably equating the rate-cost ratios for recyclable and virgin materials (assuming sufficient evidence on costs were provided). The Ex Parte 319-I Commission never addressed these questions because it never shifted the burden of proof to the carriers.

A major type of evidence relied upon by the ICC was the strong relationship of scrap movements and prices to the sales of finished products, or the lack of it between scrap movements and their price. In dealing with scrap iron and steel for example, the Commission stated that according to the data:

The movement of scrap is a function of the level of activity in the steel industry, and that while freight rates have increased steadily, the amount of tonnage carried by the railroads, as well as the price of scrap has fluctuated in accordance with steel production.156

They also noted that:

There seems to be no correlation between the amount of tonnage originated and the price of scrap. An increase in price does not seem to cause a de-

154. 356 I.C.C. at 432-34.

155. An example where the railroads were thus relieved of their burden of proof occurred in situations where the railroads had produced very few movements upon which to base the rate-cost ratio, but the shippers were not allowed to object "since they offered no evidence of additional movements." 356 I.C.C. at 127. The ICC also once noted that though there was "some indication" of competition, it was held not to exist since "the degree of this competition . . . is not known." *Id.* at 268. The Commission "reprimand[ed] the respondents for now showing the specific amount [of recyclable traffic] moving," yet found the rate in question to be reasonable. *Id.* at 271. See also *id.* at 333, 298.

156. *Id.* at 184.
crease in tonnage; in fact, in 1974 the price of scrap was the highest for the years shown, and the tonnage originated was the highest.\footnote{157}

These statements were made to illustrate the lack of effect that transport rates had upon the movement of recyclable materials. These comments, however, show the lack of understanding by the Commission of the interplay between the supply and demand for scrap iron and steel. The sales of finished steel products may, indeed, be the largest single determinant of recyclable traffic, for when the demand for steel is high, more inputs are needed to produce the steel to meet that new demand. Under the law of supply and demand, in order to induce more shipments of scrap iron and steel, its price will rise. It is therefore not at all surprising that shipments of scrap peak when its price is highest: High demand leads to high prices as well as increased purchases. This does not imply, however, that freight rates have no effect on the movement of recyclables. An even higher level of traffic may have been reached with lower rates, both because of a lower market price for scrap, and a lower price relative to that for iron ore (assuming they compete). If the magnitude of these effects is relatively small, any changes in shipments caused by higher rates may well have been concealed by the larger fluctuations in demand caused by changes in the final steel market. Without more sophisticated analysis, however, the Commission would not be able to separate out the two effects. And with the burden of proof on the railroads, a lack of showing that lower rates would not have led to an even larger increase in recycled traffic would seem to lead to the conclusion that higher rates did discourage traffic.\footnote{158}

\footnote{157. Id. at 178.}
\footnote{158. The NARI court was to deal with this point. See infra text accompanying notes 179-181. In terms of supply and demand curves, this issue can be illustrated as follows: Figure A shows a supply and a demand curve for ferrous scrap. The price where supply equals demand is \( P^s \), and the quantity shipped is \( Q^s \). Point A represents that combination. The demand for scrap iron and steel exists basically because it is used to produce finished steel. If, for some reason, it is decided that more steel will be produced, such as due to an increase in demand for steel products, the demand curve for ferrous scrap will shift up (\( D^* \) in Figure B). All of the relationships noted by the ICC can be seen here: the price and quantity of scrap increased with the level of steel production, and the quantity of scrap shipped peaked simultaneously with its price.

This can also be true when transport rates have entered the picture. If scrap suppliers pay the freight, which appears to be true, an increase in the transport rate will shift the supply curve up (to \( S^* \) in Figure C); that is, to induce it to ship the same amount as before, it would need a higher price to cover the increased cost of shipment. (If purchasers pay the freight, the demand curve would shift down by the amount of the rate increase. The same conclusions, however, would still follow.) If the increase in freight rates occurred during the period that steel production increased, the scrap market would move from point A to point C.

Once again, we would see a simultaneous increase in scrap shipments and prices along with increased steel production. Even though the transport rates had risen, all that would be directly observable would be the movement from A to C, leading the ICC to conclude that freight rates had no effect on their movement. This conclusion would be false, however, for the increase
In Section II, we developed a theory of pricing to enhance welfare. Let us now see if the ICC has taken any recognition of the implications of that theory. First, we can note that its concern for railroad revenues is consistent with the requirement in our model that the railroads break even. Total revenues must cover costs.

We have noted that the Commission used price-to-variable cost ratios instead of prices to measure disparities. This is an important improvement over the more traditional approach in two respects: First, it formalized the importance of the price-to-cost relationship instead of looking at price alone, and then costs. Second, they specifically rejected a ratio of price to fully allocated cost. This is beneficial, since efficiency depends on marginal costs and not total or average total costs.

Our theory found that a comparison of demand characteristics was crucial. The more inelastic demand is for one commodity relative to another, the higher the rate that commodity should carry, all other things being equal. While the ICC looked to rate-cost ratios for both virgin and recyclable materials and sometimes looked at comparisons of delivered prices, other estimates of demand characteristics and elasticities were presented for recyclable commodities only. For example, there was often evidence that the demand for recyclables was inelastic with respect to freight rates, but no evidence was discussed as to the demand for virgin materials. This is a serious error, for if the demand for virgin materials is

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159. It is not clear that the ICC recognized the importance of this distinction completely. While commenting on the importance of demand factors, it stated: "A rate reduction based on a revenue to variable cost ratio alone, is as unfounded as a rate reduction based on a mere disparity in rates." 356 I.C.C. at 428. Though correct in citing the importance of demand considerations, a judgment based on ratios is clearly superior to one based solely on rates (and is a judgment the Commission was to make in Ex Parte 319-II).

160. Id. at 156. See also related discussion in Section II, supra.
more inelastic than that for recyclables, then the rate-cost ratios should be higher for virgin materials in order to attain a higher level of welfare.

It should be noted that, as we recognized earlier, pricing rules based solely on cost and demand factors are not everything, and that other elements can and should enter the analysis, such as environmental considerations. Environmental factors were not deemed crucial, however, since the conclusions of the Final Environmental Impact Statement (FEIS) filed were basically that since the demand for recyclables was so little affected by transport rates, few environmental consequences would follow. The ICC did, however, face the question of the environment squarely at least once, when considering the shipment of used steel drums. The shipping characteristics of new and used drums were noted to be quite similar, their transport rates the same, and the FEIS recognized that reusing drums was environmentally beneficial. The shipper requested a lower rate for used drums than new ones, and offered "as justification for the differentiation only environmental concerns." If the ICC had thought Congress intended to put any extra weight on environmental considerations which would change the traditional measure of lawfulness, this would have seemed to be the case to show it by lowering the recyclable rate. The Commission, however, refused to lower the rate on used steel drums.\textsuperscript{161}

E. NARI-I

THE DECISION

Appeals from Ex Parte 319-I were made by the two trade groups, NARI and the Institute of Scrap Iron and Steel (ISIS), and by the United States on behalf of the EPA and the Federal Energy Administration. The case was heard before a three-judge panel, and the decision, NARI-I, was delivered by J. Skelly Wright, Chief Judge.\textsuperscript{162} The court held that the ICC had not complied with the congressional mandate of § 204 of the Quad-R Act, and it bluntly expressed its displeasure with the Commission.\textsuperscript{163}

The court faulted the ICC's handling of the burden of proof, its application of the standard of competition, and its undue emphasis on certain kinds of evidence. The Commission, it concluded, thereby failed to "meaningfully address the focal question presented by its investigation, namely whether the substantial rate disparities between recyclable and

\begin{footnotes}
\textsuperscript{161} Id. at 424-25.
\textsuperscript{162} Note 70 supra.
\textsuperscript{163} For example, the court referred to the "finessing" of issues, 585 F.2d at 534, and the conducting of "a shell game." Id. at 534 n.64. It stated that it was "unimpressed with the Commission's attempt to excuse its failure to comply with its mandate by repeated reference to the expedited nature of this investigation," referring to the excuse as "untenable." Id. at 544.
\end{footnotes}
virgin products are justified, in whole or in part, by the transportation characteristics of the products involved.”164 The court’s analysis of the legislative mandate was crucial to these conclusions.

The court characterized § 204 as an extension of earlier laws and federal reports which dealt with recycling,165 and as “not differ[ing] materially . . . from the bills considered and rejected by Congress” which dealt with freight rates on recyclables.166 It recognized that, as in the Ann Arbor R.R. case, § 204 did not “purport to change or modify substantive standards relating to the lawfulness of rates,”167 but viewed the burden of proof which had been placed on the railroads as having “erected an evidentiary presumption against the lawfulness of the rate structures,”168 “tilt[ing] the scales against existing structures.”169

The court felt that this shifting of the burden of proof was crucial, especially in view of the light burden the railroads faced when instituting general rate increases, having only to show need for increased revenues. This shifted burden, the court held, would prevent the ICC from “assuming or otherwise deferring to, asserted revenue needs,” and so fulfill the congressional mandate to “identify and remove disparities in the rate structures based on an in-depth examination of the transportation characteristics involved.”170

Besides the reaching of an “in-depth examination” of transportation characteristics, the second key goal which the court attributed to Congress was the “removal of rate structures which impeded or discouraged development of industrial recycling.”171 It should be noted that the legislative history upon which these conclusions were based was not extensive.172

The court held that the ICC had failed to carry out the specifically enumerated requirement of placing the burden of proving the legality of rates on the railroads. It was noted, for example, that the Commission “did not require the railroads to adduce proof on the subject of potential competitive injury . . . .”173 and was consciously aware of deficiencies in the railroads’ evidence,174 but nevertheless decided on the railroads’ side.175 The Court, however, never delineated what standard the railroads

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164. Id. at 534.
165. Id. at 531 n.45.
166. Id. at 532.
167. Id.
168. Id. at 533.
169. Id. at 534.
170. Id. at 533.
171. Id. at 539.
172. See supra text accompanying notes 89-94.
173. 585 F.2d at 534 n.64.
174. Id. at 529 n.33.
175. The section on scrap iron and steel in Ex Parte 319-I also had incorporated a study done
would have to meet in order to carry this burden.

The ICC also was held to have erred in the weight it accorded railroad revenue needs and data on commodity movements. As to revenue needs, the court stated that the Commission should not give "greater weight to concerns for railroad profitability than to the environmental and energy goals underlying the investigation."176 In a footnote, it also said: "Section 204, in our view, directed the Commission to order removal of unlawful rate structures, regardless of their effect on the railroads' revenue levels."177 It should be noted that while revenue needs traditionally have not always been an important factor in discrimination cases,178 it is essential for railroad viability that reasonable rates allow for adequate revenues. Nor is it clear that Congress actually did ask that revenue needs be totally left out of the analysis.

The court frequently questioned the weight given to shipment data and elasticity studies. It noted that even if the quantities of recyclables shipped had been rising, the evidence did not "account for increases in recyclable traffic that may have occurred absent the effects of the rate structures."179 The lack of evidence on intermodal competition was also noted.180 Because of the multitude of effects which could be occurring simultaneously, the court recognized that some sort of multivariate analysis would be necessary to separate all of the effects.181 Even a detailed elasticity study which took account of many variables could run into serious problems. The greatest degree of explanatory power which an elasticity estimate has is within the range of data upon which it is based. With the burden of proof on the carriers, unless it can affirmatively be shown that those past rates were lawful, any study presented would be presumed to be based on unlawful rates, and so limited in its ability to describe what demand conditions would be like under a lawful rate structure.182 Though the court may perhaps have been overzealous in its attack of the ICC's use of elasticity studies,183 it nevertheless felt that the weight accorded the movement data was undue.

176. 585 F.2d at 534.
177. Id. at 534 n.62 (emphasis added).
178. See supra note 38.
179. 585 F.2d at 540. See also id. at 535.
180. Id. at 536.
181. Id. at 535 n.71. See also supra note 158 and accompanying text.
182. See 585 F.2d at 535-36 and 536 n.72.
183. For example, the court referred to the great reliance on the "so-called Gellman elasticity study." 585 F.2d at 530 n.39. The ICC, however, while accepting evidence from the study as to market structure and competition, explicitly refused to accept its elasticity estimates for many of the same reasons the court lays out as shortcomings of such studies. Also, while chiding the ICC
As to the Commission's discrimination analysis, while accepting the use of a § 3(1) standard, the court disapproved of the "novel element" of requiring a showing of competition in fact instead of the traditional actual or potential competitive injury.\textsuperscript{184} It held that "the Commission was not entitled to apply a competition standard so narrow in scope as to obviate the statutory purpose of its investigation," the statutory purpose being the "removal of unlawful rate structures found to discourage industrial recycling."\textsuperscript{185} In noting the substitutability standard used by the ICC, the court cited Senator Tunney's preference for the functional equivalence test of competition.\textsuperscript{186} The court also cited back to the Senate Commerce Committee's concern over the standard of competition applied by the ICC:

The record before the Committee indicates that the Commission may not be taking into account the full competitive relationship between recyclable and recycled commodities, on the one hand, and virgin materials on the other hand. A reexamination of that relationship will be necessary if this investigation is to achieve its goal.\textsuperscript{187}

The court, however, did not require that the functional equivalence test for competition be used, noting that it was not in the language of § 204 or adopted by the Senate Commerce Committee.\textsuperscript{188} Rather, the court stated that "to warrant dispositive findings of no competition the Commission was required to find that the various products were neither actually nor potentially competitive for transportation purposes."\textsuperscript{189} The court also cast aside in just one paragraph the Commission's handling of the question of injury. It felt that the finding of injury was erroneously based on the shipment and elasticity data discussed above.\textsuperscript{190}

The basic fault in the ICC's handling of the reasonableness issue was what the court characterized as its undue reliance on the movement data, supplemented only by evidence of ability to "absorb current rates." The court claimed that "no other standard of reasonableness" had been applied, listing in footnote "the many variables," both cost and demand factors, which could also have been considered.\textsuperscript{191} It also stated that rates

\textsuperscript{184.} 585 F.2d at 538 n.80, citing the Chicago Board of Trade v. Ill. Cent. R.R. standard.

\textsuperscript{185.} \textit{id.} at 540.

\textsuperscript{186.} \textit{id.} at 539 n.82. Those remarks were made when Tunney introduced the amendment to shift the burden of proof to the railroads. 121 Cong. Rec. 38451.

\textsuperscript{187.} S. Rep. 94-499, \textit{supra} note 91, at 51 (emphasis added).

\textsuperscript{188.} 585 F.2d at 539 n.83.

\textsuperscript{189.} \textit{id.} at 540.

\textsuperscript{190.} \textit{id.} at 540.

\textsuperscript{191.} \textit{id.} at 535 and n.66. Included therein were: "cost of service, value of service, the existence \textit{vel non} of competition, the transportation characteristics of the commodity (weight, size, density), the anticipated volume of shipments, the distance of the haul, the availability of return
could not be approved without reference to the transportation characteristics of the commodities, and noted that no standards of maximum reasonableness were set out by the Commission, though such standards were not absolutely required.

It should be noted that perhaps the court painted too bleak a picture. For example, in its use of comparisons of the rate-to-variable cost ratios, the Commission included what traditionally falls under the cost side of transportation characteristics. Comparisons were also made by the ICC between commodities and regions. The consideration given to the relation between transport rate and market price of the commodity also reflected certain demand factors such as values of commodity and service and the ability to pay. The costs and demand factors used by the ICC do not exhaust the court’s list of the "many variables" available and may not have received sufficient weight by the Commission, but the court was not correct in asserting that none were ever taken into consideration. Perhaps part of this was due to confusion between the rate disparities of traditional analysis and the ratio analysis of Ex Parte 319-I where costs are automatically considered.

ANALYSIS OF THE DECISION

There are three crucial elements to the welfare analysis we have developed: the price-marginal cost ratio, the elasticity of demand and other considerations such as the environment. The criticism by the court in NARI-I can be viewed in light of the great amount of emphasis placed on the second element, and the ignoring of the third, as well as its erroneous view that the ICC had ignored costs.

As noted above, the court made some astute observations concerning demand elasticities and the weight placed on them. The court also brought up a crucial point not clearly enunciated before it noted that all, or nearly all, transport rate elasticities were inelastic. This is impor-

loads, the economic status of the industry, the rate level required to move the traffic, the threat of intermodal competition, and comparisons with established rates for comparable shipments in the territory involved."

192. Id. at 535, 537. See also Commercial Considerations, supra note 23, at 600-601, on the required consideration of transportation conditions.

193. 585 F.2d at 537.

194. See also id. at 537 n.78, where the court incorrectly asserts that the ICC ignored "any consideration of costs," in a note discussing the use of cost factors to establish a measure of maximum reasonableness.

195. See supra text accompanying notes 182-183.

196. 585 F.2d at 536-37. Note that an unrestrained monopolist would never choose to price on the inelastic portion of a demand curve. Profits could always be increased by raising price and lowering output. See, e.g., F.M. Scherer, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 242 (2d ed. 1980).
tant because when determining which of any given pair of commodities should bear a higher percentage markup above costs to minimize efficiency loss, it must be determined which commodity is less elastic (or more inelastic). The absolute level of the elasticity is not as important as the relative elasticity. For example, the rate elasticity for a recyclable may be low and so able to support a high rate, but the rate elasticity for the related virgin material may be lower, and better able to support the higher rate (compared to cost). In Ex Parte 319-I, as well as in the traditional case law we have examined, almost all of the discussion of elasticities, ability to pay, competitive injury, and the like, has been focused on only one of the commodities. In order to maximize welfare, both commodities must be examined.

As to the other aspects of welfare analysis, the court placed substantial weight on what it read to be a congressional intent to enhance the environment through recycling, and faulted the ICC for subverting these goals. Though traditionally the ICC has been hesitant to alter decisions on public policy grounds not directly related to transportation, the NARI-I court viewed this as a case where the legislature authorized and directed the Commission to take it (in the form of removing obstacles to recycling) into consideration.

In sum, the court held that the ICC failed to meet its mandate under § 204 of the Quad-R Act. The Commission’s order was vacated and the case remanded for further proceedings consistent with the court’s decision. The Commission was given six months in which to complete the new proceedings. 197

F. Ex Parte 319-II

In response to the decision in NARI-I, the ICC reopened the Ex Parte proceeding. In April of 1979, it issued its revised report, Ex Parte 319-II, 198 which set out new standards of judging discrimination and reasonableness in freight rates for recyclables.

Because of time constraints, little new data were accepted by the Commission. There were some updates on costs and rate-cost ratios of Ex Partes 319-I. The Commission took the opportunity to point out that, as in the earlier proceeding, included within the variable cost data (and so ratios) were cost components traditionally classified as transportation characteristics. 199

A significant addition to the evidence in the record was results of surveys of shippers and receivers of recyclable materials in the South.

197. 585 F.2d at 543.
198. See supra note 69.
199. 361 I.C.C. at 240.
This survey was undoubtedly undertaken due to a footnote in the NARI-I case calling for such a study.\textsuperscript{200} Perhaps because of the seemingly self-serving nature of such a survey, it is not surprising to find that about two-thirds of each of the shippers and receivers responding stated that their shipments and purchases of recyclables would increase if rail rates dropped. The ICC concluded that "it becomes apparent that rail freight rates do have an effect on the movement of recyclables."\textsuperscript{201}

The Commission stated that, as in Ex Parte 319-I, "we will base our investigation on the revenue-to-variable cost ratios developed for each commodity."\textsuperscript{202} We shall see that those ratios were now to reach a higher level of importance.

**STANDARDS OF DISCRIMINATION AND REASONABLENESS USED**

Once again, the ICC chose to use the "framework of the traditional section 3(1) criteria" in judging discrimination.\textsuperscript{203} The same four-step test would be used as before,\textsuperscript{204} but with extensive modifications to their standards of competition and injury.

Besides the substitutability test they had used in Ex Parte 319-I, the Commission decided to look also to competition of manufactured products in order to examine the "full competitive relationship."\textsuperscript{205} They thereby expanded their earlier requirement of competition in fact to one including potential competition as well, and so responded to the court's reading of the congressional mandate and conformed to more traditional case law. The Commission set no formal limits to its definition of potential competition (ultimately finding all paired commodities examined to be competitive). As to proof of injury, it recognized the inconclusiveness of their earlier movement data, and so decided that now once competition had been established, injury could be inferred,\textsuperscript{206} whether the competition was actual or potential.

Apparently taking its cue from the court's suggestion of setting a standard of maximum reasonableness,\textsuperscript{207} the ICC decided to judge reasonableness solely on the basis of the rate-to-variable cost ratios.

\textsuperscript{200} "In order to meet their burden of proof on this issue, the railroads should at a minimum be required to survey existing and potential users of recyclables to determine whether reductions in rates would encourage them to purchase more or make additional use of recyclable materials." 585 F.2d at 540 n.87.
\textsuperscript{201} 361 I.C.C. at 241-42.
\textsuperscript{202} Id. at 239.
\textsuperscript{203} Id. at 242.
\textsuperscript{204} See supra text accompanying note 118.
\textsuperscript{205} 361 I.C.C. at 242-43.
\textsuperscript{206} Id. at 243, citing New York v. United States, 331 U.S. at 310. See also supra notes 29-30 and accompanying text.
\textsuperscript{207} See supra note 193 and accompanying text.
Though preferring to make the determination of reasonableness on a broader consideration of the evidence, it stated:

Given the mandate of the court to make a determination of the reasonableness of all railroad rates on recyclables and given the short time constraints placed on the investigation, the Commission is employing in the unique situation presented by this case a standard of maximum rate reasonableness expressed solely as a ratio of revenue-to-variable cost.\textsuperscript{208}

In so doing, they explicitly discounted the following five traditional factors: (1) "Rate levels required to move the traffic," since the concern is to increase the traffic; (2) "Rate comparisons," since many like shipments are grouped together to compute the rate and cost figures, and because comparisons to other rates presume their legality; (3) "Revenue need," citing the court's criticism of earlier reliance on revenues, and so stating that they would "not place any emphasis on rail revenue need" [emphasis added]; (4) "Market and modal competition," since they viewed their mandate as centering on rail rates; and (5) "Value of service," because of their view that "we should not and will not let the high value of some recyclable commodities and their apparent ability to bear higher freight rates influence our decision in this case."\textsuperscript{209}

A level of reasonableness based on rate-to-variable cost ratios was therefore required. The ICC limited its search for such a ratio to only three choices, 127 percent, 160 percent, and 180 percent, apparently because these three had "played a significant role in Commission proceedings."\textsuperscript{210} The 127 percent level was the national average of all rail rates. This choice was ruled out since by definition, the Commission pointed out, half of the railroads' revenues accrue from ratios above the average, and half from ratios below. The conclusion was therefore reached that by setting the maximum ratio for recyclables at the national average, recyclable traffic would "not pay their own way" and would "have to be subsidized by the rates on other rail traffic."\textsuperscript{211} No further explanation was given.

The ratio of 160 percent was the level where a rebuttable presumption of market dominance was set. The Commission pointed out that in the past, a finding of market dominance did not automatically lead to a finding of unreasonableness, and so chose not to accept 160 percent as a level of maximum reasonableness here.\textsuperscript{212} Again, no further elaboration was given.

The third ratio, 180 percent, was the ratio the ICC chose as its reasonableness standard. It has been used as a level upon which to institute

\textsuperscript{208} 361 I.C.C. at 244.
\textsuperscript{209} Id. at 244-45.
\textsuperscript{210} Id. at 245.
\textsuperscript{211} Id. at 246.
\textsuperscript{212} Id.
investigations into unreasonableness in general rate increase proceedings. There seemed to be two reasons for selecting 180 percent as their rule. First, the ICC was concerned that it might appear inconsistent to declare as unreasonable a ratio below 180 percent when they would normally not even bother to investigate such a rate. Second, it was noted that:

The standard of 160 percent . . . allows the railroads to earn a sufficient return on their investment . . . . . . . . A standard of 180 percent allows the railroads an even greater opportunity to earn an adequate return on the investment devoted to the transportation of recyclable commodities.

Neither of their reasons justifying the 180 percent level, however, seems compelling. First, as they repeatedly stated, the case of recyclables is special. It would therefore not seem inconsistent to set a level of maximum reasonableness of less than 180 percent for recyclables and still apply the 180 percent rule in general rate increases when dealing with other sorts of commodities. Second, if a rate which is 160 percent of variable costs allowed a "sufficient return" on investment, why is it necessary to go any higher? And why even as high as 160 percent? In these terms, as long as rates exceed variable costs and so are not confiscatory, the ICC would seemingly be treading on thin ice to rely on revenue needs alone in justifying any specific level of maximum reasonableness, especially one which allows for more than "sufficient" returns. Also, recall the court's warnings of reliance on revenue arguments and the Commission's pledge to place no emphasis on them.

Given that the ICC found competitive injury in all relevant cases, the standards of discrimination and reasonableness in Ex Parte 319-II seem then to be purely cost-based. The only potentially major role demand considerations can play would seem to be in the fourth step of the discrimination analysis where disparities in ratios can be justified. In light of the emphasis the court placed on reaching an examination of transportation characteristics, it is questionable whether or not the Commission truly answered the court's concerns. The court also emphasized the importance of increasing the movement of recyclable materials; a goal which apparently was served by the ignoring of demand factors.

**APPLICATION OF STANDARDS TO THE COMMODITIES**

Ratios for recyclables which were found to be less than those for
virgin materials were immediately declared nondiscriminatory.\textsuperscript{218} If the recyclable ratios exceeded the virgin ratios, the establishment of competition was the second step in the analysis. Competition between the outputs of the commodities (a functional equivalence standard) was accepted as establishing competition between the commodities. For example, competition between iron ore and ferrous scrap was found because of competition between integrated and nonintegrated steel mills.\textsuperscript{219} Direct substitutability was occasionally found as well,\textsuperscript{220} even if the technology to prepare the recyclable material was not quite developed as yet.\textsuperscript{221}

Injury was the third step of the test. Though seldom mentioned at all, it was presumed to flow from the existence of competition.\textsuperscript{222} The Commission never indicated what evidence a carrier could submit to overcome this presumption.

The final step was where the railroads could justify the ratio disparity based on transportation characteristics. The ICC had to remind the carriers that cost elements were typically already included in the variable cost figures,\textsuperscript{223} and when the railroads alleged that these cost figures did not adequately represent costs, the Commission held that they failed their burden of proving so.\textsuperscript{224} Demand considerations were introduced, but never held to justify changes in the rates, whether it was the shippers or carriers introducing the data.\textsuperscript{225}

The reasonableness determinations hinged solely on whether or not the ratios on recyclables exceeded 180 percent. Where they did, they were held to be unreasonably high.\textsuperscript{226} Where they were below 180 percent, they were held to be reasonable, even if the ratios on the recyclables varied widely between territories.\textsuperscript{227}

Only once, with chemical or petroleum wastes, were transportation characteristics introduced to justify ratios exceeding 180 percent. The

\textsuperscript{218} See 361 I.C.C. at 250, 255, 258, 260, 264, 266, 269. It should also be noted, however, that if demand elasticities for recyclables exceed those for virgin materials, our theoretical pricing rules would call for a lower price-cost ratio for recyclables.

\textsuperscript{219} Id. at 250. See also id. at 255, 259, 260, 261, 262-63, 268-69.

\textsuperscript{220} See, e.g., id. at 258, 259, 268.

\textsuperscript{221} Id. at 267 (technology to separate glass cullet).

\textsuperscript{222} See, e.g., id. at 250, 259.

\textsuperscript{223} See, e.g., id. at 251, 255, 259, 263.

\textsuperscript{224} See, e.g., id. at 251, 252, 261.

\textsuperscript{225} For example, the fact that recyclable glass cullet was worth three times virgin sand, id. at 267, see also id. at 259, 263, or that the rate-to-price ratio was several times lower for aluminum scrap than for virgin bauxite ore, id. at 255-56, see also id. at 263, 267, was not held sufficient to justify a higher rate-to-variable cost ratio for recyclables.

\textsuperscript{226} Id. at 257, 260, 261, 268, 269, 271, 272, 273, 274.

\textsuperscript{227} See, e.g., id. at 261 (ratios ranging from 78% to 155%), and 264 (ranging from 129% to 163%).
carriers alleged that though the rate-to-price ratio was high for one such commodity in this classification, the fact that these shipments would be made regardless of transport rates justified a higher rate. The ICC held, however, that the railroads had failed to prove that reasonable rates would have to exceed 180 percent, and so ordered them down.\(^{228}\) It is also interesting to note that rates on recyclables which fell below cost were declared not unreasonably low, with no further explanation.\(^{229}\)

In effect, the test actually applied by the ICC was a three-part test it had earlier enumerated.\(^{230}\) First, it looked for disparities in the revenue-to-variable cost ratios of the virgin and recyclable materials. Second, if such a disparity existed which was unjustified, the ratios were ordered to be equalized.\(^{231}\) Third, in no case would a recyclable ratio be allowed to exceed 180 percent.\(^{232}\) Though it was conceivably possible for the railroads to get outside of these rules by proving lack of competition or injury or by justifying the rates by transportation characteristics, the ICC never found them to have met their burden to do so.

**Analysis of the Decision**

The most notable departure in the Ex Parte 319-II decision from traditional handling of rate cases is the striking de-emphasis of demand considerations. The *NARI-I* court had questioned the validity of the reliance on movement data, but more on the grounds that all the effects of changes in traffic had not been separated out and that the concern was to increase traffic instead of simply maintaining the status quo. The court had also challenged the use of elasticity studies, first on the grounds that most transport demands are inelastic, so looking at just one will not be conclusive, and second because those studies were based only on data of past rates, rates of limited range and of presumed illegality. The court had not totally ruled out the use of demand evidence, but was only concerned that the Commission in Ex Parte 319-I had used it in the early

\(^{228}\) *Id.* at 274.

\(^{229}\) *Id.* at 261 (a ratio of 78%), and 270 (ratios of 55%, 64%, and 69%).

\(^{230}\) *Id.* at 248-49.

\(^{231}\) There was one instance where this did not occur, which was with nonferrous ashes or miscellaneous residues. The ICC stated that "no evidence of record" was submitted by anyone including recyclable shippers that there was any competition whatsoever with "any form of bauxite or in the production of aluminum." The finding of no competition was therefore reached, and the recyclable ratios were not ordered to be equalized. *Id.* at 255.

\(^{232}\) Oddly, the ICC described this as "the traditional discrimination evaluation." *Id.* at 248. It did not appear to be traditional since the steps of proving competition and injury were missing, though these elements were subsequently discussed in the specific case, and since only the first two steps seem related to discrimination, the third being their test of reasonableness. Even though this three-step test was outlined in the general discussion of discrimination and reasonableness, the four-step test of discrimination as enumerated in Ex Parte 319-I was the one actually applied in a straightforward fashion in Ex Parte 319-II.
stages of its analysis improperly to avoid getting into a detailed examination of justifying the rate disparities.

The Commission apparently construed the court’s meaning as allowing it to ignore demand considerations and look only to costs. This downplaying of demand factors belittled an important element in welfare maximization. The element of price-cost ratios, however, was still considered (though taking a more singular role than welfare maximization would call for), as was the congressionally-imposed concern for the environment which lead to the ignoring of demand in this case. Somewhat ironically, these new standards were promulgated in order to carry out these environmental goals, even though the Commission itself still found there to be no significant effect on the environment because of the small role it found rail rates play in the use of recyclable rates.233

G. NARI-II

Most of the parties appealed from the Ex Parte 319-II decision, including the railroads, shippers and users of recyclable materials. The court in NARI-II234 upheld the ICC’s findings of competition and discrimination as well as their use of a standard of maximum reasonableness. The court vacated both the 180 percent standard of reasonableness and some of the remedies provided in the discrimination section, referring to them as “beyond [the ICC’s] authority or without support in the record.”235

DISCRIMINATION

The court accepted the use of the four-step test of discrimination, and then examined its application by the Commission. It accepted the use of disparities in revenue-to-variable cost ratios as opposed to disparities in rates for the first step. It recognized that variable costs were components of transportation characteristics, and also stated that “[w]here rate disparities are matched by proportionate differences in variable costs, [that is, when rate-to-variable cost ratios are equal] there is no unjust discrimination.” This supported the Commission’s practice of declaring as non-discriminatory to recyclables all rates where the virgin ratios exceeded recyclable ratios, without having to consider demand characteristics.236

Though the ICC never clearly defined its conception of potential com-

233. Id. at 277.
234. See supra note 71.
235. Id., 627 F.2d at 1331. In a per curiam decision, the Supreme Court upheld the lower court’s power to send the 180% standard back to the ICC, but held that the court erred as to the specific remedy ordered. Consolidated Rail Corp., 449 U.S. at 612. See also infra notes 242 and 248.
236. 627 F.2d at 1334.
petition, its use of competition between final products was viewed by the court as a long-run test of potential competition between the recyclable and virgin inputs. The court accepted this long-run test as a valid definition of competition, especially in light of the congressional intent to encourage recyclable traffic.\textsuperscript{237} Once competition had been shown, the inference of injury was accepted by the court, noting that railroads had again failed their burden of proving otherwise.\textsuperscript{238}

The court also held that even though little evidence of transportation characteristics had been provided, "'[t]he Commission has now complied with NARI-I's directive to . . . determine whether rate disparities are justified by transportation characteristics submitted into evidence.'"\textsuperscript{239} Other than the cost factors already included within variable costs, minimal evidence pertaining to transportation characteristics had been submitted; but since much of this evidence was available to the railroads, and since the burden of proof was on them to justify the rates, the presumption of unlawful discrimination remained.\textsuperscript{240}

Where the court faulted the ICC's discrimination analysis was in its remedy. To alleviate discrimination, the ICC had allowed the railroads to increase both recyclable and virgin ratios to parity if it so chose, and as long as it remained under the 180 percent level. This, the court held, ran counter to the congressional intent to remove barriers from increased levels of recycling.\textsuperscript{241} In remedying discrimination against recyclables, it was held that the recyclable rates could not be increased.\textsuperscript{242} In its appeal to the Supreme Court, this was the only aspect of the NARI-II decision which the railroads challenged. In a per curiam decision, the Court held that even though the lower court had the authority to remand the issue of the appropriateness of the 180 percent standard, it could not order the revocation of the rates.\textsuperscript{243}

**Reasonableness**

The two key questions in the ICC's handling of reasonableness were the use of the rate-cost ratios as the test, and the choice of its critical value. As to the first point, the court noted that "'unlike other ICC investi-

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\textsuperscript{237} Id. at 1335.

\textsuperscript{238} Id. at 1336: "'Since a finding of competition can logically and theoretically support an inference that shippers are potentially injured by discriminatory rates, it was up to the railroads to show that injury does not in fact occur.'"

\textsuperscript{239} Id. at 1337.

\textsuperscript{240} Id.

\textsuperscript{241} Id. at 1338-39.

\textsuperscript{242} Also cited was American Express Co. v. Caldwell, 244 U.S. 617 (1917), which similarly forbade the increasing of both rates to achieve equality. 627 F.2d at 1338.

\textsuperscript{243} Consolidated Rail Corp., 449 U.S. at 612. It should be noted that the issue of the propriety of using rate-cost ratios was not raised to the Court.
gations into reasonableness of rates, the Commission established a standard based solely on the factor of variable cost."\textsuperscript{244} This method was accepted:

The Commission chose a simplified approach in this proceeding due to the complexity of and time constraints on its investigation. In light of these factors, we find it reasonable and within the Commission's discretion to use such a simplified standard based on revenue-cost ratio.\textsuperscript{245}

It should be noted that through the acceptance of this test, the court at this point seemed to be indicating that demand considerations could be ignored entirely.

Though approving of a maximum reasonableness standard, the court did not take so kindly to the choice of the 180 percent level. They found a "disturbing lack of support and explanation" for it on the record.\textsuperscript{246} They pointed out that the Commission had made no attempt to either "predict the profit margin which would result," or "analyze the fairness of that level of profit." The court went on to say that a "reasonable" profit could be made at the ratio level eventually decided upon, and that this reasonable profit could even conceivably exceed the "average" level of profit.\textsuperscript{247} But the court then did an interesting thing. After seemingly ruling them out, it brought demand considerations back into the picture:

[W]e require that the ICC must first examine the profit level that results from its prescribed standard of reasonableness for rates, and then justify higher than normal profitability levels by traditional standards such as, for instance, a relatively high value of commodities shipped . . . .\textsuperscript{248}

Apparently, demand considerations have not been totally ruled out in reasonableness analysis in this case.

\textbf{Analysis of the Decision}

More explicitly than seen before, the use of revenue-to-variable cost ratios in helping to judge discrimination and reasonableness was endorsed. The court approved of its use in the first step of "traditional" discrimination analysis, and as possibly the only step in reasonableness analysis. The use of ratios was endorsed even in the face of overall percentage increases in rates as a means to keep up with inflation.\textsuperscript{249}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{244} 627 F.2d at 1339.
\item \textsuperscript{245} id. (footnote omitted).
\item \textsuperscript{246} id.
\item \textsuperscript{247} id. at 1340.
\item \textsuperscript{248} id. (all original emphasis removed, other added).
\item \textsuperscript{249} id. at 1341. The basic remanded issues for nonferrous recycled materials have been resolved as a consequence of the Staggers Rail Act (where the maximum allowable revenue-to-variable-cost ratio is to be the average "that rail carriers would be required to realize, under honest, economical, and efficient management, in order to cover total operating expenses . . . plus a reasonable and economic profit or return . . . ") 49 U.S.C. § 10731(e); the Ex Parte 394 proceedings (which found the necessary average revenue-to-variable-cost ratio to be 146\% in
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The importance of demand considerations was eroded even further. In discrimination analysis, it still could be used to justify ratio disparities, but the shifted burden of proof makes this somewhat harder. Its use in reasonableness analysis now seems limited to perhaps helping set the overall level of maximum reasonableness or possibly in justifying rates exceeding it. It seems apparent, though, that one could go through a whole reasonableness analysis without ever considering demand factors.

As to other elements, the concern for the environment by Congress is again invoked to justify departures from traditional standards. Citing back to the NARI-I decision and to the legislative history of § 204 for its reading of the congressional mandate, the court found that the "clear congressional intent behind § 204 was to remove barriers to increased levels of recycling, if such barriers should be found to exist."^{250}

V. CONCLUSION

A basic goal of price regulation is to promote a higher level of social well-being, or welfare, than is attainable absent regulation. In economic theory, the highest level of welfare, measured in terms of total surplus, is achieved only when the prices of goods are equal to their respective marginal costs of production. In an industry where marginal costs are less than average total cost, setting prices equal to marginal cost would lead to financial losses, since the firm’s full costs would not be covered. The specific task that a regulator of such an industry would have, therefore, assuming a desire to keep the industry financially solvent without subsidization, is to maximize total welfare subject to full cost recovery by firms through user revenues.

The key variable our regulator must manipulate is how far above marginal costs the price of each commodity should be allowed to rise. That is, the price of each commodity should at least cover marginal cost, and then some or all of the prices must make contributions above marginal cost so that the firm can break even. The second crucial variable in welfare maximization, the demand characteristics for each commodity, provides the rationale for just how high the price, or rate, should be. According to the Ramsey-price analysis above, the less price elastic is demand, the smaller is the negative effect on the quantity demanded that a given rise in the price will cause, and so the higher the price should be.

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364 I.C.C. 425 (1980); and NARI v. ICC, 660 F.2d 795 (D.C. Cir. 1981), and NARI v. ICC, 704 F.2d 638 (D.C. Cir. 1983) (where rates were ordered to drop immediately to the 146% level). For ferrous scrap, issues such as the proper standard of discrimination and the appropriate ratio, if any, for maximum reasonableness were still pending as of March 1984 in Ex Parte 319, reopened in 364 I.C.C. 874 (1981).

250. 627 F.2d at 1338, citing NARI-I, 585 F.2d at 532, 535; and S. Rep. 94-499, supra note 91.
allowed to rise above marginal cost. There may also exist certain externalities, such as environmental impact and general notions of equity and fairness. To have prices lead to a social optimum, adjustments beyond those based solely on internal cost and demand factors may have to be made.

The traditional handling of rate reasonableness and discrimination takes into account the two crucial elements of our economic model of welfare maximization. Cases typically refer to rate disparities, but the costs associated with those rates are often presented in the same breath. The ICC and courts are initially concerned with whether rates exist which are in some manner justified by costs.

Demand characteristics also traditionally enter the decision. If commodities are found not to be competitively injured by these disparities, or if it appears that the traffic in question can bear the burden, high rates (relative to costs) are often thereby justified. There is a theoretical flaw in the typical demand analysis in that the demand characteristics of a commodity are largely viewed in isolation rather than in relation to those for other commodities.

When it comes to the nonmarket externalities, the Commission is often hesitant to allow the outcome of a proceeding to be affected by them. Consideration of these factors, especially when not directly related to transportation concerns, is not traditionally viewed as being within its authority.

The case of virgin and recyclable materials is a case where traditional standards of rate lawfulness seemed not to reach a desired end. The results did not somehow seem "right" to Congress, all things considered. The traditional analysis had left out consideration of important factors such as the environment. In this instance Congress decided that in welfare terms, these factors would justify a movement away from the result of applying traditional standards, or at least the result the ICC had reached. Congress first made an effort in this direction in § 603 of the 3-R Act of 1973 by calling upon the Commission to adopt rules to "eliminate discrimination against the shipment of recyclable materials." Apparently still not satisfied with the response it received, Congress passed § 204 of the Quad-R Act of 1976 and made known its concern for the environment and its feelings that recyclables therefore required special treatment. Rather than approaching this directly, Congress chose to accomplish this purpose by shifting the traditional burden of proving rate lawfulness from shippers to the carriers, thereby carrying with it a presumption that existing rates were unlawful.

During the course of the Commission and judicial proceedings which followed, the importance in welfare terms of rate-to-variable-cost ratios was enlarge upon, while the role played by demand factors in justifying
disparities in rate-cost ratios diminished. Those ratios became the explicitly approved means of judging rate disparities, and seemingly of reasonableness itself. The environmental concerns underlying the directive from Congress were never directly quantified in the decision-making process by Congress, the courts or the Commission. Instead, the traditional consideration of demand factors (which are also essential in a Ramsey analysis) was weakened by the ICC and courts, apparently to facilitate the preferred result.

Regardless of the result in this instance, however, this approach can set a dangerous precedent, because demand considerations are crucial in reaching a maximum level of social welfare. That is, applying purely cost-based pricing to recyclable and virgin materials may improve the level of social welfare because of the environmental impact, but if extended to all commodities in general, where environmental, demand and other factors are different, society could pay dearly in terms of welfare. If the end reached by the traditional standards is not viewed as optimal, then an adjustment should be made; but the emphasis should be on creating a process which consistently reaches desirable ends, such as through a system incorporating both Ramsey pricing and the internalization of externalities. The emphasis should not be on searching for any process which reaches the particular end desired in only the one case. It seems to be dangerous precedent here to make large alterations in the established and important ratemaking criteria of cost and demand factors solely to effect a change in the rate structure of recyclable and virgin materials.

APPENDIX

DERIVATION OF THE RAMSEY PRICING RULE ACCOMPANYING NOTE (8) ABOVE

Let us deal with a two-commodity case where the output (or quantity shipped) of each is denoted by $X^a$ and $X^b$. Let the inverse demand function for each be denoted by $P^a(X^a)$ and $P^b(X^b)$; that is, the price of a good depends upon the amount of it sold or shipped (which is just the flip side of saying that output depends on price). The area under the demand curve at any level of output is simply the integral of the inverse demand

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function taken out to that output. Assume that the demand for each commodity is independent of the other (an assumption relaxed in Janis (1984)) and that there are no income effects. Finally, let the total cost to the producer or railroad of making or shipping \(X^a\) and \(X^b\) be \(C(X^a, X^b)\). Total Welfare, \(T\), as measured by the area under the demand curves less total cost, therefore is:

\[
T = \int_0^{X^a} P^a(w)\,dw + \int_0^{X^b} P^b(w)\,dw - C(X^a, X^b).
\]

This, plus the requirement that profits be non-negative, can then be put in terms of the following Lagrangian equation:

\[
L = \int_0^{X^a} P^a(w)\,dw + \int_0^{X^b} P^b(w)\,dw - C(X^a, X^b) + \lambda [P^a(X^a)X^a + P^b(X^b)X^b - C(X^a, X^b)].
\]

To solve this Lagrangian, first derivatives with respect to \(X^a\), \(X^b\), and \(\lambda\) (the so-called Lagrangian multiplier) must be taken and set equal to zero. The result with respect to \(X^a\) would be:

\[
L_a = P^a - \frac{\partial C}{\partial X^a} + \lambda \left( P^a + X^a \frac{\partial P^a}{\partial X^a} - \frac{\partial C}{\partial X^a} \right) = 0.
\]

Rearranging (c), and dividing both sides of the equation by \(P^a\), we get:

\[
\frac{P^a}{P^a} - \frac{\partial C}{P^a \partial X^a} = -\frac{\lambda}{1 + \lambda} \left( \frac{X^a}{P^a} \frac{\partial P^a}{\partial X^a} \right).
\]

By dividing both sides by the bracketed term on the right, and noting that \(\frac{1}{\partial P^a \partial X^a} = \frac{\partial X^a}{P^a}\) in the absence of income effects and cross elasticities, that \(\frac{P^a}{X^a} \frac{\partial X^a}{P^a}\) is the own price elasticity of demand for good \(a\), \(\epsilon^a\), and that \(\frac{\partial C}{\partial X^a}\) is the marginal cost of producing or shipping \(a\), \(MC^a\), we get:

\[
\frac{P^a}{P^a} - \frac{MC^a}{P^a} \epsilon^a = -\frac{\lambda}{1 + \lambda}.
\]

A similar result is reached when we differentiate the Lagrangian (b) with respect to \(X^b\):

\[
\frac{P^b}{P^b} - \frac{MC^b}{P^b} \epsilon^b = -\frac{\lambda}{1 + \lambda}.
\]
Equations (e) and (f) lead directly to the Ramsey-pricing rule of equation (1) in the text.
Differentiating the Lagrangian with respect to \( \lambda \) simply leads to the non-negative-profits constraint.
Market Protection, Deregulation, and the Question of Industry Losses

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EDWARD A. MORASH*

I. INTRODUCTION

Government regulation of industry has continuously been a subject of concern to economists and policymakers. As one important instance of economic regulation, Interstate Commerce Commission (ICC) regulation of motor carriers has received particular scrutiny from some economists. Critics of motor carrier regulation often contend that regulatory rate and entry controls restrain competition, raise the price of transportation services, redistribute income from consumers to carriers, misallocate traffic amongst transportation modes, and allow firms to achieve monop-

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oly gains. Indeed, part of the inefficiency of regulation is commonly measured by the aggregate value of interstate motor carrier operating rights.\textsuperscript{2} Although discussed more fully in the next section of this paper, operating rights are basically government permits which allow motor carriers to operate in specified transportation markets with limited competition.\textsuperscript{3} To most economists, the value of these operating authorities represents the capitalized value of excess profits made possible by protected markets and excessive rate levels.\textsuperscript{4}

Because of continuing doubts over the efficiency of regulation, the U.S. Congress enacted the Motor Carrier Act of 1980 (MCA) which significantly increases competition in the motor carrier field.\textsuperscript{5} Thus, in implementing this legislation, the ICC has relaxed both rate and entry controls and has allowed a proliferation of less restrictive versions of operating authorities.\textsuperscript{6} However, an important question for deregulation as well as any future regulatory reform proposals is whether the removal of regulatory protection means that motor carriers have suffered a net economic loss from deregulation. Although carriers have lost protection from open competition and the resale and collateral values of their interstate operating rights,\textsuperscript{7} they have also gained new opportunities to achieve efficiency in operations, to adjust freight rates to market forces, to reduce costly service competition, and to expand markets.\textsuperscript{8} Furthermore, while an artificial barrier to entry has been removed, it is not clear whether all barriers of economic substance have been eliminated. Because reform legislation

\begin{footnotes}
\item[3.] Operating rights are also referred to as operating authorities or “certificates of public convenience and necessity.” This paper will use these terms interchangeably. Similar regulatory permits in other industries would include taxicab medallions, stock exchange memberships, tobacco acreage allotments, broadcasting rights, liquor store licenses, and zoning permits. See Breen, supra note 2, at 158 and INTERSTATE COMMERCE COMMISSION, THE VALUE OF MOTOR CARRIER OPERATING RIGHTS 179-86 (Washington, D.C.: Office of Policy and Analysis, October 1979).
\item[4.] Frew, supra note 2, at 290; G. Wilson, Economic Analysis of Intercity Freight Transportation 213 (1980); Denis A. Breen, supra note 2, at 163; and Kafoglis, A Pardox of Regulated Trucking: Valuable Operating Rights in a ‘Competitive’ Industry, 1 REG. 27, 32 (1977).
\item[7.] Supra note 6, at 94; INTERSTATE COMMERCE COMMISSION, MOTOR CARRIER CERTIFICATE SALES 1-7 (Washington, D.C.: Office of Policy and Analysis, internal report, October 1981).
\end{footnotes}
such as the MCA of 1980 is a package of economic trade-offs, it is possible that its advantages could offset its disadvantages so that little or no industry-wide economic losses would result. In the present paper, this issue will be examined within the context of the efficient-markets/rational-expectations framework.

The next section of this paper will briefly discuss the economic nature of interstate motor carrier operating rights. Also discussed are issues relevant to deregulation and barriers to entry. Section II will then outline the empirical market based methodology employed in this study to ascertain the real economic consequences of deregulation for the motor carrier industry. Section III will present the findings of the research, while Section IV will set forth conclusions for deregulation as well as implications for future regulatory reform proposals.

A. MOTOR CARRIER OPERATING RIGHTS

Operating rights are permits which allow motor carriers to haul specified commodities with limited competition over designated routes or within prescribed geographical areas. In the past, these operating authorities or "certificates of public convenience and necessity" were acquired either directly from the ICC, from another carrier, or through mergers. Carriers which were in substantial operation at the time of motor carrier deregulation in 1935 almost automatically received their "grandfather" operating rights. However, since that time, new carriers or carriers wishing to expand their operations had to prove that existing carriers would not be hurt, that existing carriers could not provide the service, and that there was a compelling public need.

Because of the difficulty in obtaining new or expanded operating authority from the ICC, a large resale market has existed for these certificates. For example, at the time of bankruptcy of Associated Freight Lines, their operating rights were separately sold for 20 million dollars. Operating rights were regularly advertised in such trade publications as Transport Topics and certain persons specialized in the matching of both buyers and sellers of these certificates.


12. Wilson, supra note 4, at 213.
B. DEREGULATION AND OPERATING RIGHTS

The Motor Carrier Act of 1980 was a legislative attempt to promote competition amongst motor carriers and to remove barriers to efficient operations as a means of providing better quality and more flexible service to shippers at a lower cost.\(^\text{13}\) While it is expected that this legislation will eventually benefit shippers, consumers, and the economy; unresolved are issues concerning the effects of deregulation on the motor carrier industry as a whole or certain segments within the industry.\(^\text{14}\) Thus, in relaxing entry controls, the ICC has allowed a proliferation of less restrictive versions of operating rights. For example, prior to the MCA (in 1979) there were 17,000 regulated carriers in the nation while after deregulation (as of 1983) there are now 28,000 certificated carriers.\(^\text{15}\) More importantly, for both new and existing operating authorities, the MCA mandates that certificate restrictions be eliminated or reduced as to backhaul restrictions, number of shippers to be served, intermediate points to be served, types of commodities to be handled, geographical scope, gateways to be observed, highways to be traveled, intermodal transfers, and interlining.\(^\text{16}\) Finally, the Act gives carriers greater freedom in setting rates, yet the MCA also weakens rate bureaus and strengthens the rights of independent carrier rate actions. In total, the MCA appears to provide both advantages and disadvantages for carriers.

C. OPERATING RIGHTS LOSSES

As a result of motor carrier deregulation, the Financial Accounting Standards Board (FASB), which promulgates accounting standards for industry in general, has required that all motor carriers write off the intangible asset values of their interstate operating rights as extraordinary losses.\(^\text{17}\) The FASB had taken the position that since operating authorities no longer protected carriers from competition, their resale and collateral values were open to question, and hence, they should no longer be reported as intangible assets. Consequently, the FASB saw the need for a new accounting standard (Statement of Financial Accounting Standards No. 44 (FAS 44)) which required that the entire unamortized cost of all

\(^{13}\) Motor Carrier Act of 1980, supra note 8.

\(^{14}\) Harper, supra note 10, at 31; and Morash, supra note 1, at 555.

\(^{15}\) 1980, 1984 INTERSTATE COMMERCE COMMISSION ANN. REP.


\(^{17}\) FINANCIAL ACCOUNTING STANDARDS BOARD, ACCOUNTING FOR INTANGIBLE ASSETS OF MOTOR CARRIERS, STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 44 par. 15 (Stamford, Conn.: December 1980).
carrier operating rights be written off against income and if material to be reported as extraordinary losses—effective for fiscal years ending after December 15, 1980.\textsuperscript{18}

The reported accounting losses from these certificate write-offs were quite substantial. For the motor carrier industry as a whole, the intangible asset write-offs amounted to almost 800 million dollars.\textsuperscript{19} For publicly traded carriers, the average loss per share amounted to $2.45, which represented 157 percent of the average 1979 earnings per share and resulted in a negative average reported earnings figure for these firms in 1980.\textsuperscript{20}

\textbf{D. THE QUESTION OF ECONOMIC LOSSES}

Although these reported accounting losses were substantial, they may not represent substantive economic losses to motor carriers if the benefits of deregulation will outweigh any costs from increased competition. Because the MCA of 1980 is a package of economic trade-offs, it is possible that the advantages of the Act could offset the disadvantages, and hence, the reported accounting losses may not mirror true economic losses. Thus, while motor carriers have lost protection from competition on the one hand, they have also gained new opportunities such as fewer territorial and commodity restrictions, easier route expansion, and more control over freight rates.\textsuperscript{21} Specifically, carriers are now free to ship a wider variety of goods along the most direct route from origin to destination, to solicit back-haul traffic, to serve intermediate points along a particular route, to provide through service without interlining, and to eliminate unprofitable traffic. In terms of pricing policy, carriers can now more quickly adjust freight rates to meet inflation, to utilize excess capacity, or to attract new customers without competitor protests or rate bureau interference. Finally, they can also reduce cost-inflating service competition and tailor price-service offerings to regain traffic currently moving by pri-

\textsuperscript{18} \textit{Id.} at par. 6. The FASB adopted the view that a major deregulation such as the MCA can only happen once and is unusual enough to justify treatment of any associated material losses as extraordinary items under Accounting Principles Board Opinion No. 30 (APB 30). According to APB 30, before a material gain or loss can be classified as an extraordinary item, the causal event must be of unusual nature and not reasonably be expected to recur in the foreseeable future, taking into account the environment in which the reporting entity operates.

\textsuperscript{19} \textsc{Interstate Commerce Commission}, supra note 6, at 93. For Class I intercity motor carriers alone, the accounting losses from certificate write-offs amount to approximately 520 million dollars. 1982 ICC Ann. Rep. 3. At the time of enactment of the MCA, tax relief was not provided for. Eventually, partial relief was granted by the \textit{Economic Recovery Tax Act of 1981}, Pub. L. No. 97-34, 95 Stat. 172, 266.

\textsuperscript{20} Summary data regarding industry earnings, extraordinary losses, and share price levels is presented in Table 1 in the Results section of this article.

\textsuperscript{21} \textit{See, e.g., Interstar\textsc{e} Commerce Commission}, supra note 6; and Harper, supra note 10.
vate, exempt, and rail carriers. However, whether these potential benefits will outweigh the loss in carrier market protection and industry stability is not clear at the present time.

Although the MCA has removed a legal or artificial barrier to competition, it is also unclear whether all barriers, including those of economic substance, have now been removed in order to institute truly unlimited competition. Over many years, certain carriers have established nationwide networks of integrated break-bulk and satellite terminals (which also impacts on service quality such as delivery time) (e.g., large LTL carriers) while others have achieved recognized reputations and experience in specific transportation markets. Similarly, many operating authorities were purchased just prior to the MCA at prices not reflective of a valueshattering deregulation. Such authorities were acquired in order to establish market positions in anticipation of regulatory reform. In essence, established carriers and those carriers who purchased authorities prior to the MCA received the opportunity to gain a “head start” in penetrating lucrative markets. Thus, efficient carriers that are well managed and have been entrenched in their markets prior to deregulation are unlikely to attract a barrage of competition after deregulation. However, carriers that provide inefficient service should feel considerable pressure from new competition.

A second potential barrier relates to firm capital costs. For example, while lending institutions do not make loans in anticipation of forcing carriers to liquidate their operating authorities, the collateral value of these assets did provide a safety net for loans granted to marginal carriers. Without this protection, banks must now shift emphasis from the resale value of the rights to what the rights represent in terms of cash flows generated by well-managed market positions. Consequently, the new regulatory climate will increase the pressure on financial institutions to channel

22. Nelson, supra note 9, at 382.

23. The largest of these carriers have over 500 terminals. For a discussion of similar issues related to barriers to entry, see DeVany and Saving, Product Quality, Uncertainty, and Regulation: The Trucking Industry, 67 Am. Econ. R. 583 (1977); J. Rakowski, The Nature of Competition in Common Carrier Trucking, in Boundaries Between Competition and Economic Regulation 180-183 (J. Rhoads Foster et al. eds. 1983); Frew, supra note 2, at 302; and J. Snow and S. Sobotka, Certificate Values, in Regulation of Entry and Pricing in Truck Transportation 155 (P. MacAvoy and J. Snow eds. 1977).


capital to those carriers who have the capacity to employ the funds in the most efficient manner. These firms are likely to be those carriers who have the ability to take advantage of the new opportunities fostered by deregulation. New carriers are likely to feel the credit squeeze as these firms have depended heavily on operating rights as primary and secondary collateral for loans.26 Thus, while a more liberal policy for granting operating certificates may ease an artificial barrier to entry, the loss in collateral value of these certificates may toughen an economic barrier—the need to obtain financing.27 Essentially, new entrants are likely to experience some difficulty in obtaining credit at reasonable rates since banks will give priority to established carriers with a proven performance record.

Motor carriers have lost the resale and collateral value of their interstate operating rights. However, because the MCA is a package of economic trade-offs, it is possible that its advantages (e.g., less restrictions and new expansion opportunities) could offset its disadvantages (e.g., loss of protection from unlimited competition) so that the reported accounting losses may not mirror true economic losses. In the next two sections, the positive analysis of this issue is empirically examined within the framework of a market based study.

II. METHODOLOGY

The primary research question addressed in this study is whether the removal of regulatory protections means that motor carriers have suffered a net economic loss from deregulation. Although motor carriers have been required to write off the intangible asset values of their interstate operating rights,28 such write-offs may not be losses in an economic sense if any decline in these values is offset by the economic benefits of regulatory reform. Although some respondents to deregulation believe that time will be required to fully evaluate the economic impact of the MCA, the stock market has been shown to be an efficient processor of information.29 According to the “efficient-market/rational-expectations hypothesis,” share prices instantaneously impound all publicly available

26. INTERSTATE COMMERCE COMMISSION, supra note 3, at 150-1; See also Boris, Motor Carrier Deregulation, in BOUNDARIES BETWEEN COMPETITION AND ECONOMIC REGULATION 174 (J. Rhoads Foster et al. eds. 1983).
relevant information. Share prices are theoretically the discounted future cash flows that investors anticipate will enhance the wealth of shareholders. Consequently, if deregulation and the associated intangible asset devaluations as measured by the extraordinary losses reported for 1980 in compliance with FAS 44 have impaired the ability of motor carriers to generate future cash flows, then these firms have suffered substantive economic losses which should be impounded in their share prices. Such affected share prices should be more associated with the 1980 per share earnings after extraordinary items which have recognized such losses, than with the 1980 per share earnings before extraordinary items. On the other hand, if the write-offs do not reflect substantive economic losses, then the share prices of motor carrier stocks should be more associated with the 1980 per share earnings before extraordinary items as these figures recognized no loss in the value of intangible assets. In short, market efficiency implies that investors will act upon any relevant information and ignore all irrelevant data.

Because earnings and share prices have been shown to exhibit similar structures within industries, the first step was to construct a model descriptive of the manner in which the securities market capitalizes the earnings of motor carriers. The parameters for this cross-sectional model were empirically derived using ordinary least squares regression. The independent variable was 1979 Earnings Per Share (EPS) and the dependent variable was the average monthly share price computed over the twelve month period surrounding December 31, 1979. The year 1979 was selected because it was the last full year prior to the MCA, and for

31. Schwert, supra note 30, at 122.
34. Earnings and share price data were respectively obtained from SEC 10-K reports and the daily stock price record publications of Standard and Poors. The 38 publicly held motor carriers, which are the primary focus of this research, are exhaustive of all publicly traded SEC-registered motor carriers (SEC Industry Class #421) that are directly affected by certificate writeoffs. These firms range in size from annual revenues of 22 million dollars to over a billion.
1979 motor carrier earnings before were virtually the same as after extraordinary items. Thus, there was only one year-end earnings number for the market to capitalize. Next, the validity of this earnings-capitalization model was tested by employing data from another year (1978). The use of 1978 data also controlled for the unlikely possibility that the capital markets had anticipated the economic effects of the MCA of 1980 as early as 1978.

To answer the primary research question, the third step in the analysis tested the residuals estimated from the industry earnings capitalization model, in order to ascertain the post-deregulation relationship between motor carrier share price levels and annual earnings numbers. The basic premise underlying the residual method, as used in this research, is that if motor carrier stock prices are cross-sectionally correlated, their variance can be segmented into two components: that explained by earnings and that explained by other factors. The objective of this analysis was therefore to determine which earnings number, 1980 earnings before ($E_{1980}$) or after ($E_{1980}^\alpha$) extraordinary items, had the greater role in explaining carrier share price behavior (see Table 1 for subscript notation).

The final phase of the research provided two independent consistency checks for the findings of the present study. The first approach compared the performance of motor carrier share prices to the New York Stock Exchange Composite Indicator over the two year period surrounding deregulation. The second approach compared goodwill ratios for a new matched sample of 36 pre- and post-deregulation merged firms. The basic premise of this latter approach was that if motor carriers have received a benefit from deregulation, then the purchased goodwill of acquiring firms involved in mergers after deregulation will be greater than before deregulation. This latter test also has the added advantage of being able to compare non-publicly held firms, since the method does not depend on share price data.

III. RESULTS

A. EARNINGS-CAPITALIZATION MODEL

The first step in the analysis was to generate the earnings-capitalization model (hereafter the EC model) utilizing data from the first full year prior to motor carrier deregulation (1979). Table 1 presents the summary statistics for the earnings and price variables in the trucking industry from 1978 through 1980. The 1979 data were used to estimate the parameters for the EC model as expressed in equation (1).

dollars and account for almost 40 percent of industry revenues. A sample of smaller non-publicly held firms was also used in a methodology subsequently described.
TABLE 1

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings Per Share (EPS) Levels(^a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978 ((E_1))</td>
<td>$1.62</td>
<td>$1.75</td>
<td>1.42</td>
</tr>
<tr>
<td>1979 ((E_0))</td>
<td>1.63</td>
<td>1.56</td>
<td>1.86</td>
</tr>
<tr>
<td>1980 ((E_{1b}))(^b)</td>
<td>1.56</td>
<td>1.58</td>
<td>2.24</td>
</tr>
<tr>
<td>1980 ((E_{1a}))(^c)</td>
<td>-1.05</td>
<td>-0.88</td>
<td>3.32</td>
</tr>
<tr>
<td>Extraordinary Loss Per Share (1980)</td>
<td>2.45</td>
<td>2.45</td>
<td>1.83</td>
</tr>
<tr>
<td>Aggregate Share Price Levels(^a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978 ((P_{1}))</td>
<td>10.55</td>
<td>12.09</td>
<td>7.85</td>
</tr>
<tr>
<td>1979 ((P_{0}))</td>
<td>8.96</td>
<td>11.15</td>
<td>7.58</td>
</tr>
<tr>
<td>1980 ((P_{1}))</td>
<td>10.54</td>
<td>13.27</td>
<td>10.32</td>
</tr>
</tbody>
</table>

\(^a\) Key to subscript notation:
- \(0\) = Year of Earnings-Capitalization (EC) Model.
- \(1\) = 1 year after EC Model (or first year of deregulation).
- \(-1\) = 1 year before EC Model
\(^b\) Before extraordinary items
\(^c\) After extraordinary items

\[
\hat{P}_0 = 6.55 + 2.94E_0; \ R^2 = .52, \ d.f. = 36, \ F = 39.4^* \tag{1}
\]

where:
- \(\hat{P}_0\) = estimated mean share price level for 1979.
- \(E_0\) = 1979 EPS
- \(^*p<.001\)

Equation (2) is the expression for the residual term associated with the 1979 EC model.

\[
U_0 = P_0 - 6.55 - 2.94E_0 \tag{2}
\]

where:
- \(U_0\) = a residual or a \(N(0, \sigma)\) disturbance term associated with the 1979 model.

For each firm, the residual term measures the unexpected portion of the ex post share price level conditional upon the ex post earnings level. Alternately, the magnitude of the residual term measures that portion of a firm's share price that is not attributable to earnings, and thus may be viewed as an "unexpected" or an "abnormal segment" of that firm's price level. Since the expected value of a residual term is zero,\(^{35}\) a

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residual greater (less) than zero suggests that based upon the EC model the market has “overpriced” (“underpriced”) a firm’s earnings relative to other firms in the industry. Similarly, a residual (or residual vector) with a nonzero value(s) implies that there is irrelevant information contained in the earnings number(s) that is not being impounded in the security price(s); i.e., the information is perceived by the market to be of little economic impact.

B. VALIDITY OF EARNINGS-CAPITALIZATION MODEL

The second step in the research was to test the validity of the 1979 EC model as being representative of the cross-sectional relationship between earnings and share price levels in the motor carrier industry. In order for such a test to have credibility, the EC model should be tested using a data set other than that used to construct the model. Thus, the 1979 EC model was tested using 1978 data. Furthermore, the use of 1978 data controlled for the possibility that the securities market had anticipated and impounded the economic losses attributable to the MCA prior to the end of 1979.

The test was conducted by estimating a residual vector \( \hat{U}_{-1} \) by applying the parameters of the 1979 EC model to the 1978 EPS (\( E_{-1} \)) and share price (\( P_{-1} \)) numbers (for a key to the subscript notation, see footnote a of Table 1). According to Student’s paired t-test, the \( \hat{U}_{-1} \) and \( \hat{U}_0 \) residuals did not differ significantly (\( t = 0.67 \); Table 2). Clearly, the \( \hat{U}_{-1} \) vector mean

<table>
<thead>
<tr>
<th>Residuals</th>
<th>Median</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>( \hat{U}_{1A} )</th>
<th>( \hat{U}_{1B} )</th>
<th>( \hat{U}_0 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \hat{U}_{1} )</td>
<td>- .95</td>
<td>.39</td>
<td>5.24</td>
<td>7.45*</td>
<td>2.46</td>
<td>0.67</td>
</tr>
<tr>
<td>( U_0 )</td>
<td>- .54</td>
<td>.00</td>
<td>5.24</td>
<td>8.88*</td>
<td>2.81</td>
<td></td>
</tr>
<tr>
<td>( \hat{U}_{1B} )</td>
<td>.29</td>
<td>2.08</td>
<td>6.63</td>
<td>( \hat{U}_{1B} )</td>
<td>8.27*</td>
<td></td>
</tr>
<tr>
<td>( \hat{U}_{1A} )</td>
<td>7.88</td>
<td>9.30</td>
<td>7.90</td>
<td>( \hat{U}_{1A} )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Test of \( H_0 \) that the intersecting row and column residuals do not differ.

\( ^{*} p < .001 \)

\( \hat{U}_1 \) = residual vector estimated using 1978 price and earnings data and the parameters of the 1979 EC model.

\( U_0 \) = residual vector for the 1979 EC model.

\( \hat{U}_{1B} \) = residual vector estimated using 1980 price and earnings before extraordinary items and the parameters of the 1979 EC model.

\( \hat{U}_{1A} \) = residual vector estimated using 1980 price and earnings after extraordinary items and the parameters of the 1979 EC model.
of .39 is very close to zero (see Table 2). The results of this analysis therefore suggest that the 1979 EC model is descriptive of the motor carrier industry's earnings-price structure, and that the securities market did not anticipate the effects of motor carrier deregulation as early as 1978.

C. Deregulation and Abnormal Price Levels

To answer the primary research question, the third step in the analysis was to apply the parameters of the EC model to the 1980 earnings numbers before and after extraordinary items. The purpose of this analysis was to generate the residual vectors ($\hat{U}_{18}$ and $\hat{U}_{1A}$) associated respectively with the 1980 earnings figure before extraordinary losses ($E_{18}$) and the earnings figure after extraordinary losses ($E_{1A}$). Since these residual vectors represent the "abnormal" price levels associated with the respective EPS figures, the vector means are measures of the extent to which the stock market disregarded the two earnings numbers.

Table 2 shows that the mean value for vector $\hat{U}_{18}$ is 2.08 while the mean for vector $\hat{U}_{1A}$ is 9.30. According to the paired t-test, the $\hat{U}_{1A}$ vector is significantly greater than the $\hat{U}_{18}$ vector ($t=8.27; p < .001; Table 2$). In short, the securities market has on the average "overpriced $E_{18}$ by $2.08 per share and $E_{1A}$ by $9.30 per share. Since market efficiency precludes the over or under-pricing of securities and since $\hat{U}_{1A}$ is significantly greater than $\hat{U}_{18}$, one may conclude that the market capitalized $E_{18}$ to a significantly greater degree than it capitalized $E_{1A}$. Stated alternately, the $E_{1A}$ number is characterized by more irrelevant information. Finally, it is important to note that both residual vector means are positive which indicates that rather than the presence of substantive economic losses, deregulation may be of net-positive economic benefit to publicly-held motor carriers in the long run.

In summary, the results of this analysis suggest that the reported extraordinary losses mandated by FAS 44 were not perceived by the market as substantive economic losses that would be expected to impair future cash flows for the motor carrier industry as a whole. The substantially "over-priced" $E_{1A}$ numbers are evidence that the market did not adjust share prices downward to reflect such losses. Furthermore, the market did not adjust prices prior to the end of 1979 as the $\hat{U}_1$ and $U_0$ vectors did not differ significantly from each other. Had such an adjustment occurred during 1979 (1978), the $E_{1A}$ figures would have appeared as "over-priced" ("underpriced"). Essentially, these results indicate that the market ignored the reported accounting losses associated with deregulation and did not anticipate a long-run economic loss for publicly held motor carriers.
D. Deregulation and Security Price Performance

As an additional test of the research question related to economic losses, the security price performance of the 38 motor carriers were compared over time with the performance of an overall stock market indicator. As the stock market is an efficient processor of information, one would expect motor carrier stocks to perform poorly relative to the market indicator if the FAS 44 certificate write-offs signaled substantive economic losses.\(^{36}\)

The performance of motor carrier stocks was compared to the performance of the stock market as measured by the New York Stock Exchange Composite Indicator (NYSE) for the two-year period encompassing deregulation (see Table 3). According to Table 3 the gen-

| TABLE 3 |
| A Comparison of the Movements of Motor Carrier Stocks and the New York Stock Exchange Composite Index (NYSE) |

<table>
<thead>
<tr>
<th>Directional Movement</th>
<th>Advances</th>
<th>Declines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same</td>
<td>Opposite</td>
<td>NYSE 38 carriers</td>
</tr>
<tr>
<td>Before Deregulation</td>
<td>9(^a)</td>
<td>2</td>
</tr>
<tr>
<td>After Deregulation</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>(x^2) (sig.)</td>
<td>0.00 (NS)</td>
<td>0.26 (NS)</td>
</tr>
</tbody>
</table>

\(^a\) During the period encompassing the MCA from the end of May 1979 to the end of June 1981 there were 22 four-month “moving” periods, 11 occurring before deregulation and 11 occurring after deregulation. The figures in each cell refer to the number of such periods that had exhibited the growth characteristics as indicated in the given column headings. Geometric means were used to compute the monthly growth rates for each moving four-month period.

\(^b\) A composite portfolio consisting of the 38 motor carrier common stocks that were publicly traded during the deregulation period.

eral performance of the trucking stocks in aggregate did not differ significantly from that of the NYSE regarding (1) directional movements of the respective four-months moving indicators, (2) the number of advances in the four-month moving indicators, and (3) the number of declines in the four-month moving indicators both before and after deregulation.

In summary, the data in Table 3 also suggests that motor carrier certificate write-offs have had no substantive economic impact on the motor carrier industry as a whole. During the deregulation period, the movement of carrier stock prices in the aggregate did not differ substantially

\(^{36}\) Schwert, supra note 30, at 121.
from the movement in the general stock market indicator. In fact, the motor carriers led the market in advances. Basically, these results also indicate that deregulation has not impaired the ability of motor carriers to generate future cash flows.

E. DEREGULATION AND MERGER GOODWILL RATIOS

As a final check on the findings of this study, a new matched sample of pre- and post-deregulation merged firms were statistically compared. The basic premise of this approach was that if motor carriers have received a benefit from deregulation, then these benefits would become capitalized into purchased goodwill on the books of merged firms after deregulation. Consequently, goodwill ratios (purchased goodwill ÷ total assets) would appear inflated for those acquiring firms involved in mergers after deregulation when compared to goodwill ratios for those acquiring firms involved in mergers prior to deregulation. This latter approach also has the added advantage of being able to study non-publicly held firms since the method does not require share price data.

The sample consisted of 18 acquiring firms involved in mergers after the date of the FAS 44 certificate write-offs (December 15, 1980), and 18 acquiring firms involved in mergers prior to deregulation. The two subsamples were obtained from the ICC’s listing of merged firms and were selected so as to match paired firms as closely as possible by total assets and other financial characteristics. To minimize other exogenous factors and to better reflect current market values, an attempt was also made to select merged firms as close to the preceding cut-off date as possible.

The pre-deregulation goodwill ratios were calculated using 1979 data from the 1980 edition of Trinc’s Bluebook of the Trucking Industry while the post-deregulation ratios were calculated using 1981 data from the 1982 edition of the same source. For comparability, the pre-deregulation goodwill ratios required the subtraction of the FAS 44 certificate write-offs from both the numerator (goodwill) and the denominator (total assets) of each firm, since pre-regulation intangible assets consisted of both operating rights and goodwill. The post-deregulation ratios, of course, already reflected the write-off of operating rights as intangible assets.\(^{37}\)

According to the Wilcoxon Matched-Pairs Test, the goodwill ratio for the post-deregulation acquiring firms is significantly greater than that for the pre-deregulation acquiring firms (\(Z = 1.78, \text{one-tailed } p \leq .05\)). This relationship is also true for goodwill numbers (\(Z = 2.44 \text{ p } \leq .05\)). In es-

\(^{37}\) Prior to deregulation, motor carrier intangible assets consisted of operating rights and goodwill. After deregulation, the latter remained as the only intangible asset item.
ence, these results also indicate that the MCA is of benefit to motor carriers.

IV. CONCLUSIONS

A common argument against deregulation of an industry is that existing firms will suffer, that the industry will become unstable, and that "chaos" and destructive competition will prevail. Despite the loss in protection from open competition, the results of the present study indicate that interstate motor carriers have not suffered a substantive economic loss from deregulation. Thus, the earnings number which reported motor carrier operating rights as worthless was virtually ignored by the capital market, the performance of motor carrier share prices has paralleled that of the market indicator during the periods surrounding deregulation, and for merged firms after deregulation, the benefits of regulatory reform have been capitalized into "purchased goodwill." The explanation for these findings is that the long-run economic benefits of deregulation will outweigh any costs associated with the loss in protection from competition and the devaluation of motor carrier operating rights. In the case of motor carriers, these long-run benefits would include improved capacity utilization, relief from cost-inflating operating restrictions, an elimination of wasteful service competition, reduced common carrier responsibilities, future opportunities for market expansion, and pricing flexibility. In fact, since the securities market has on average "priced" 1980 earnings per share above 1979 and 1978 EPS figures (see Table 2), the MCA of 1980 may be of net-positive economic benefit to motor carriers in the long-run once the transitional shake-out period has ended and the industry has settled into equilibrium.

Although a major purpose of deregulation was to remove artificial barriers to entry, it is also unlikely that all barriers of economic substance have been removed to institute truly unlimited competition. First, transportation markets are characterized by differentiated and specialized services which means that transportation output is largely heterogeneous. Secondly, many carriers have received the benefit of a "headstart" afforded by past regulatory protection. Third, it has been previously noted that it will be very difficult for potential new entrants to duplicate the extensive terminal networks, communication systems, and national exposure of some already established firms (e.g., large LTL carriers where economies of scale in the production of quality may also exist.). Similarly, while in a deregulated environment, efficient firms will gain over inefficient firms, carriers with greater economic power, established reputations, knowledge of transportation markets, marketing synergies, and economies of utilization may be especially suited to take advantage of the new market and route expansion opportunities afforded by the MCA. Finally, as out-
lined in the introductory section of this paper, capital costs and capital cost levels will remain significant barriers for some potential new entrants. In total, the new competitive environment is likely to impose at least a "zero-sum" game on the industry rather than the "negative-sum" game as suggested by the devaluation of motor carrier operating rights. In turn, for shippers, consumers, and the national economy, the early evidence suggests that deregulation should prove a "positive-sum" game.\textsuperscript{38}

The argument that an industry will suffer from deregulation is not supported by the results of this study. Rather, if the MCA is viewed as an experiment in partial deregulation, then the results of this study suggest that additional regulatory reform may be desirable. It would be expected that such a policy would benefit not only shippers, consumers, and the economy; but also incumbent firms in the industry as well.

The Rise and Decline of Protective Economic Airline Regulation in Canada*

ANTHONY P. ELLISON*

I. INTRODUCTION

The mid-seventies marked turning points for the civil aviation industries in the United States and Canada. The industries, distinguished by their technical advances, offering seemingly lower real prices and achieving high growth rates, had experienced sharp reverses as the economies faltered in the aftermath of the energy crises. The pressures to reverse these movements, and to return to falling real prices and high growths, moved against the largely protective regulation within which both the scheduled industries had operated for almost four decades. Regulatory reform, however, has not been an irresistible force, and the turning points have led in different directions.

Unlike the privately owned industry in the United States, which has been undergoing structural adjustment¹ in the wake of the Airline Deregulation Act of 1978,² in Canada, regulation of the mixed private and government-owned industry has been eroded rather than removed, and has resulted in the extension of government ownership of the industry. In

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* Mr. Ellison’s paper was originally written and submitted to the Transportation Law Journal in the fall of 1983.
* Mr. Ellison, graduating with a BSc and M.A. in Economics from Leicester University is currently senior economist at the Economics Counsel of Canada.
Canada, the federal government had established at the inception of the industry, and has retained for four decades, ownership and regulatory control over Air Canada, the dominant domestic and international carrier. In 1977, although Air Canada was placed under the authority of the Canadian Transport Commission (CTC), the regulatory agency, the carrier remained owned and financed by the federal government. It has been the erosion of the protective regulatory policy in Canada, founded on geographical divisions, "preferred vehicles" and route protection, which has revealed both the vulnerability of the regional carriers and the strength of Air Canada.

The corrosive action upon the protective regulation has come from outside the domestic industry. The substantial diversion of traffic from Canadian domestic carriers to the lower priced transcontinental routes in the United States and the transatlantic routes resulted in the entry of charters on the Canadian transcontinental routes. The diversion to U.S. transcontinental carriers was substantial because of the proximity of the larger Canadian centers to border points served by U.S. carriers. These border points in the U.S. are also among those currently served by carriers offering invitingly low fares to transborder travellers. The diversion of traffic from transborder flights is growing and is placing not only downward pressure on transborder scheduled rates, but is also placing pressure on the side of those who are negotiating for a liberal bilateral agreement between the two countries.

The strength of the federally owned carrier and the weakness of the regionals is clearly shown in central Canada, the most populated region of the country. Of the two regional carriers operating in this region, one has been acquired by Air Canada, and the other by the Quebec government. Whereas in 1977 only one regional carrier was provincially owned, by 1981 only one of the five regional carriers remained largely independent of either federal or provincial ownership. The erosion of the protective regulatory policy has played its part in this outcome. In contrast to the emergence of almost unrestricted competition on transcontinental routes, on most north-south mainline routes, regulation served to prevent the national carriers (Air Canada and C.P. Air) from competing with the regionals. It has been the erosion of these regional boundaries and protected routes, and the entry of the nationals into the charter markets to the south that have revealed the failure of the Regional Carrier Policy to nurture strong, competitive regional carriers. Competing U.S. carriers on transborder and U.S. continental routes promise to present the nationals with a test of their competitive temper.
II. EARLY HISTORY OF AIR CANADA

The passage of the Trans-Canada Airlines Act in 1937 was apparently propelled by the desire of the federal government to contribute towards the economic and political integration of the country and to thwart the entry of American-owned carriers. Trans-Canada Airlines (TCA)—known as Air Canada since 1964—was established to supply services which no one existing carrier was then providing. As a "preferred vehicle" of government policy, it was to supply transcontinental services and those which the government deemed to be of national importance. TCA was also a wholly owned government entity, Canadian National Railway, the federally owned railway, holding all the shares.

Parliament, in passing the Transport Act in 1938, extended the jurisdiction of the Board of Transport Commissioners (formerly the Board of Railway Commissioners) to include the economic regulation of air carriers. In 1944, a three member Air Transport Board (ATB) was created. Although the ATB could issue licenses, it was subject to approval of the Minister of Transport. Furthermore, the ATB was to grant, upon application, a license to TCA for the provision of a commercial air service according to the terms of any agreement made with the Minister of Transport under the Trans-Canada Airlines Act. Under the Trans-Canada Airlines Act, the Governor in Council was empowered to authorize the Minister of Transport to enter into a contract with TCA for the provision of "speedy and efficient transport across Canada of passengers and goods." The points and routes specified in the Trans-Canada Contract were to be designated by Governor in Council.

A statement made by the Prime Minister in 1943 made it clear TCA was intended to operate all transcontinental routes and "mainline" services as the government might from time to time designate. On these routes TCA was protected from competition, and able to develop a system of internal cross-subsidization. Privately owned carriers were confined primarily to north-south routes. The largest privately owned carrier was Canada Pacific Airlines (C.P. Air), a subsidiary of Canadian Pacific Railroad, having been formed in 1942 with the merger of a number of

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6. The Board of Transport Commissioners was a quasi-judicial body, whereas the new Air Transport, who, in effect, was the regulator of the air industry from 1944 until 1967. The change in 1944 occurred as a result of the Board of Trade Commissions' making a decision with respect to C.P Air which the Cabinet did not approve. D. CORBETT, supra note 4, at 151–65.
smaller carriers. Despite the entry of C.P. Air into the international market in 1949, TCA retained its monopoly on transcontinental routes until 1959.

The selection of certain carriers as “preferred vehicles” was also reflected in the Regional Air Carrier Policy, announced by the Minister of Transport in 1966.\(^9\) The regional carriers grew from the merger of small bush operators, graduating to scheduled routes by operating larger aircraft. The policy, however, established one carrier as the preferred vehicle for the development of regional and local air services. Pacific Western Airlines (PWA) was assigned British Columbia and Alberta; Transair, the prairies and north-western Ontario; Nordair, the remainder of Ontario north-eastern Quebec; Quebecair, the regional of Quebec east of Montreal; and Eastern Provincial Airways (EPA), the Atlantic Provinces. They were to provide scheduled services as a supplement to and not in competition with C.P. Air and Air Canada, the designated “national” carriers. Their operations, however, were encouraged by voluntary route transfers from the nationals, by the expansion of a direct subsidy program\(^{10}\) and by an easing of domes tic\(^{11}\) charter regulations.

III. THE REGULATORY FRAMEWORK

The economic and safety regulation of civil aviation in Canada falls within the jurisdiction of the federal government.\(^{12}\) Parliament has granted powers to the CTC and the Governor in Council (in effect, the Cabinet) to regulate the air transport industry. The National Transportation Act\(^{13}\) and the Aeronautics Act\(^{14}\) govern the regulation of the industry.

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10. A limited policy of temporary subsidies was introduced and applied to scheduled or regular routes. The level of regional subsidies was frozen in 1975 at about Cnd. $2 million; EPA and Quebecair obtained most of the subsidies, with small amounts going to Transair in 1967, '68, and '70. Transport Canadian, Economic Regulation and Competition in the Domestic Air Courier Industry 106 (1981).
11. The regionals were encouraged to develop domestic charters as a supplement to regular route operations. However, the regulations in effect restricted carriers to chartering between points on their own route network. As a result, the expansion of domestic charters (particularly between points in southern Canada, was substantially limited. The 1966 Statement of Aviation Policy Principles, supra note 9 at 138–39, encouraged the regionals to expand into long-range international charter flying “without detriment to Air Canada and CPA regular route operations.” By providing international charter services during the winter months, the regionals were able to obtain year-round utilization of their jets. Such business expanded, especially as there was greater freedom to enter the international charter market than there was for the domestic charter market.
The detailed provisions describing the control of aeronautics in Canada are principally located in the Aeronautics Act and the regulations made pursuant to the Act. The Aeronautics Act sets out the respective powers, duties and responsibilities of the Minister of Transport and the CTC. The ultimate responsibility for policy guidance resides with the federal government and is normally offered through statements issued by the Minister of Transport. Neither the National Transportation Act nor the Aeronautics Act, however, provides an explicit legal power for policy direction to the CTC. In practice, the Air Transport Committee (ATC), acting for the CTC, has been responsive to relevant government policy statements.

The National Transportation Act established the CTC as an independent regulatory body, reporting to Parliament through the Minister of Transport. Commissioners are appointed by the government for 10 years, hold office during good behavior, and are only removable "for cause." The National Transportation Act also provides for appeals from decisions of the CTC to the Minister of Transport in the case of licensing decisions, and for the Governor in Council to "vary and rescind" any order of the CTC.

Part I of the Aeronautics Act makes the Minister of Transport responsible for regulating airport and air navigational facilities and services, and the enforcement of safety standards in air carrier operations. The regulatory powers of the CTC are set out in broad terms in Part II of the Aeronautics Act, and have been supplemented by detailed provisions in the Air Carrier Regulations enacted pursuant to the Act. The CTC is empowered to regulate the right to provide commercial air services and generally to regulate airline tariffs, terms and conditions of services and mergers and acquisitions. In issuing a license, the CTC can prescribe the routes that may be followed or the areas to be served and it can suspend, cancel and amend any license. The ATC, acting on behalf of the CTC, is not allowed to issue a license, unless it is satisfied that "the proposed commercial air service is and will be required by the present and future public convenience and necessity."

The ATC can suspend or disallow a tariff; it can require a carrier to substitute a satisfactory tariff for one disallowed; and it can substitute a satisfactory tariff for the one disallowed if it deems the fare filed by the carrier is unjust, unreasonable, unjustly discriminatory or unreasonably preferential.

Until 1977, Air Canada was free from regulatory control by the ATC.

16. Id. at 25, 65.
18. Id. at Part II, 7(1).
19. Id. at Part VI, 113(3).
except in matters of tariffs. The Crown Corporation operated under the Air Canada Act\textsuperscript{20} and was subject to the provisions of the Air Canada Contract.\textsuperscript{21} Any Air Canada service authorized under the contract was to be granted by the CTC. The Air Canada Contract ceased to exist with the passage of the Air Canada Act of 1977,\textsuperscript{22} and the discretion over the approval of Air Canada’s license applications was placed with the ATC. Since this time, the ATC has been permitted to apply the criteria of “convenience and necessity”\textsuperscript{23} in judging Air Canada’s license applications.

Air Canada is a wholly owned Crown corporation, in which the Minister of Transport acts as a trustee shareholder for the federal government. Under the Air Canada Act of 1977, the Governor in Council is empowered to issue directives of a general nature of Air Canada, and to appoint the chairman and president of the corporation. Air Canada is required to refer various reports, such as those submitted annually by the Board of Directors and auditors, to a Committee of Parliament formed to review matters relating to transport. As a Crown corporation, Air Canada is subject to general financial control, direction and accountability under the Financial Administration Act.\textsuperscript{24} Under the statute, Air Canada is required to submit an annual capital budget for approval by Governor in Council on the recommendation of the Minister of Transport, the President of the Treasury Board and the Minister of Finance.

IV. THE EROSION OF DIRECT REGULATION

The passage of the National Transportation Act\textsuperscript{25} (NTA) in 1967 marked the government’s apparent move away from regimes of direct economic regulation of the transport modes and towards those in which competition in the market place was to be the major regulator. Section 3 of the NTA states:

It is hereby declared that an economic, efficient and adequate transportation system making the best use of all available modes of transportation at the lowest total cost is essential to protect the interest of the users of transportation and to maintain the economic well-being and growth of Canada, and that these objectives are most likely to be achieved when all modes of transport are able to compete under conditions ensuring that, having due regard to national policy and to legal and constitutional requirements.

The phrase “having due regard to national policy and to legal and constitutional requirements” placed a limitation on the move to complete

\textsuperscript{21} Id. at 14.
\textsuperscript{22} Can. Stat. ch. 5 (1977-78).
\textsuperscript{24} CAN. REV. STAT. ch. F-10 (1970).
\textsuperscript{25} CAN. REV. STAT. ch. N-17 (1970).
regulation by the market. In air travel, the limitation remained, as a Transport Canada document states, "both the government and the CTC have seen competition in air transportation as an important objective but one that most markets in Canada cannot afford." The transcontinental market was apparently one that could afford competition.

In 1967, the federal Transport Minister made public the Transcontinental Air Service Policy, which states that it was in the public interest to increase C.P. Air’s frequencies and points served on transcontinental routes. In 1958, C.P. Air had been elevated to a "national carrier" and authorized to provide one daily return transcontinental flight serving Vancouver, Winnipeg, Toronto and Montreal. This authorization, however, rather than introducing a process of "regulated competition" launched a system of "administered market shares." The 1967 policy allowed the carrier to add Calgary, Edmonton and Ottawa to its daily transcontinental flights, and to provide, by 1970, 25 per cent of the available transcontinental seats. In 1977, however, the controls between C.P. Air and Air Canada were significantly loosened with the reduction of C.P. Air's capacity and turnaround restriction. On March 23, 1979, the Minister of Transport removed the remaining restrictions, leaving C.P. Air with the freedom to operate without capacity restrictions and to apply to the ATC for authority to serve additional points anywhere within Canada.

Competition on the transcontinental market, however, was the exception, for in the first decade of the NTA, the CTC pursued a policy of protecting the "preferred vehicles" from competition. Protecting Air Canada’s mainline routes from competition was seen as necessary to the generation of internal subsidies and to the maintenance of unprofitable but desirable "social" services.

The Regional Air Carrier Policy, announced on August 15, 1969, specified the regional boundaries in which the five regional carriers could operate. The regional's role, as "preferred vehicles," was to operate local or regional routes to supplement the domestic mainline operations of

27. Westell, Air Carrier Ties Loosened for Expo, GLOBE AND MAIL, Mar. 27, 1967 at 1, col. 6.
28. In granting CP Air access to transcontinental routes in 1958, the Air Transport Board, the predecessor of the CTC, found that the position of CP Air as an international carrier required bolstering, and that the carrier required a license to operate a daily transcontinental service to connect CPA’s existing international operations at Vancouver and Montreal. J.J. Smith, Regulatory Moves in Canadian Air Transport—Pragmatists at Work. Can. Transp. Research Forum Annual Meeting, Charlottetown, P.E.I. (June 10–12, 1981).
29. CP Air’s share of transcontinental market capacity was to be increased from 25 per cent to 35 percent of the growth in 1978 and to 45 percent of the market’s growth in 1979. It was also allowed to turn around at points in western Canada on flights from Vancouver, Ottawa, Montreal or Toronto. Department of Transport (Can.), Press Release (June 28, 1977), P.I.
the nationals and to provide regular and scheduled services to the north. The Regional Air Carrier Policy, however, did state that "there may well be circumstances where other operations of a Regional Carrier in its own areas ought to extend into adjacent areas of another Regional Carrier. These would be dealt with by the CTC on their merits," but the regionals were not to "become directly competitive on any substantial scale with the two mainline carrier." Where the "economic and efficient operation of a regional route pattern" involved competition with one of the nationals on a mainline route segment, the regionals could receive authorization: "In these cases, the National carrier would be expected to limit its competitive efforts, with the ATC to exercise appropriate control if necessary."31 By 1977, the restrictive licensing policies of the CTC resulted in 168 city-pairs with over 10,000 trips, some 55 per cent having been authorized for schedule service by only one carrier.32 Of the remaining 45 per cent, the great majority were dominated by one airline carrying 70 per cent or more of the traffic.33 Air Canada, operating in effect as three airlines in one, remained the dominant domestic and international carrier. It was the major transcontinental and international carrier; it dominated the high volume, short-haul mainline routes in central Canada and it remained a local service carrier to a number of small centers. It was the largest carrier in the Canadian-American transborder and scheduled market, performing 40 of some 115 daily scheduled transborder flights.34 Of the industry's aggregate domestic and international revenue in 1978, Air Canada's share was 51 per cent.35 Over 65 per cent of the scheduled revenue ton miles flown on domestic routes in 1978 were supplied by Air Canada.36 Although the potential domestic competitors to Air Canada were, with the exception of PWA,37 largely privately owned and financed, Air Canada

31. Id. at 141–142.
32. Transport Canada, supra note 26, at 134.
33. Id.
35. Transport Canada supra note 26, at 352.
36. Id. at 125.
37. Zwarun, Buckling up at PWA, CAN. BUS., Mar., 1983, at 109. The Conservative government of Alberta purchased PWA for $38 million in August 1974. It was widely considered to be a move designed to retain work in Alberta rather than British Columbia and was expected to make a bid for the carrier. The take-over was approved by the Supreme Court of Canada in 1977. In September 1982 a provincial government task force was set up to study the sale of the carrier. The Premier, however, established the guidelines that western Canadians retain control and that the shares be widely distributed as possible. Provincial ownership, however, has not been confined to regional carriers. In October 1981, the provincial government of Saskatchewan initiated the acquisition of Norcanair, a local carrier. This carrier was originally known as Saskair, and was established by the government of Saskatchewan in the late forties. It was sold to the private
remained financed by debt offerings issued by the federal government and subject, under the Air Canada Contract, to licensing control not from the CTC but from the Minister of Transport. The Air Canada Act of 1977,\textsuperscript{38} revoked the Air Canada contract. Instead Air Canada’s license applications were now subject to the discretion of the ATC. However, the Crown corporation was still required to comply with directives from the Governor in Council "of a general nature."\textsuperscript{39}

Under Sections 10 to 16 of the Air Canada Act, the large debt accrued by Air Canada\textsuperscript{40} was cancelled, and in turn the federal government purchased 329,000 common shares at $1,000 each, creating a debt/equity ratio of 60/40. This ratio was in line with carriers of comparable size in North America. Section 6 of the Act specified the activities complementary to air transport and which the company was permitted to acquire and operate. Air Canada was permitted to engage in activities related to aircraft, hotels, surface vehicles and both capital and maintenance facilities for the transport and housing of goods and persons. In effect, the carrier was now able to extend its presence in the market by vertically integrating and presenting new services. Under Section 7(2), the Board of Directors were to have "due regard for sound business principles, and in particular, to the contemplation of profit." Provisions were also made in Section 8 of the Act for compensation to be paid to the corporation for any losses incurred as a result of complying with "direc-

\textsuperscript{38} The Air Canada Act authorized the Government of Canada to purchase up to Cnd. $750 million of nontransferable shares, up to $600 million of which could be purchased in exchange for an equivalent amount of Air Canada debt owed to the Government of Canada and the CNR. Of the new equity, Cnd. $329 million has been issued, leaving Cnd. $421 million of unissued share capital available for issue without the need for Parliamentary approval if the Governor in Council determines in the future that Air Canada would benefit from additional equity contributions. Such contributions could be either in cash or through conversion of any government held debt. Of the total loan guarantees from the Government of Canada of Cnd. $750 million, $252 million has been utilized to date. Thus, the Government, if it wishes, could invest up to Cnd. $919 million of equity debt and/or guarantees. Air Canada Act, Can. Stat. Ch. 5 (1977–78).
tives of a general nature" from the Governor in Council.\textsuperscript{41} Despite the directive to follow sound business principles, it was not clear whether Air Canada was still expected to operate unremunerative "social" services.\textsuperscript{42}

Although, permitted to expand into complementary services and instructed to have regard to the profit motive, Air Canada's license applications were now subject, as were all other domestic carriers, to the discretion of the ATC. It was less certain, however, that carriers would start from comparable positions in a competitive market. Air Canada's debt was backed by the federal government, and it remained the dominant carrier and price leader in domestic and international markets. In pursuing the NTA's goal by increasing competition, the CTC would clearly have to consider the implications of the considerable market power and financial strength enjoyed by Air Canada and its potential domestic competitors. Competition did increase, and the resulting performance and changes in ownership of the regionals underlined the market and financial strength Air Canada enjoyed over its domestic competitors.

The forces activating the initial regulatory changes originated outside the domestic market. It was as a consequence of lower fares resulting from the competition between scheduled and charter carriers on a number of international long-haul routes, that the regionals were presented with access into domestic markets beyond their boundaries. Domestic charters would now be offered to a public aware of low international fares and desirous of lower domestic fares.

V. THE CONSEQUENCE OF THE ENTRY OF CHARTERS

During the spring of 1977, it became apparent to a growing number of travellers that it was cheaper to travel across the North Atlantic than it was to travel across Canada. So many chose to travel on international routes, that the jump in the travel deficit in the balance of payments was explained as being due in large part to marked differences in domestic and international fares.\textsuperscript{43} A large proportion of air passengers traveled


\textsuperscript{42} Section 8 of the Air Canada Act, 1977 states that the airlines must "comply with directions of a general nature given to it by order of the Governor in Council." Under § 9, however, it is made clear that the Cabinet may compensate the airline for losses incurred as a result of compliance with an order under section 8. These provisions seem to suggest that where the federal government wants the airline to serve unremunerative routes it is prepared to pay a subsidy. This alternative, however, may be blocked by the language of section 8 which speaks of "directions of a general nature" from the Cabinet. A specific route or even a number of routes may not fall within the meaning of this provision of the Act.

\textsuperscript{43} In 1977 the balance of payments on travel account had fallen to a deficit of $1675 million (Canadian), having been in deficit to the extent of $284 million (Canadian), in 1974. Not all of this increased deficit, however, has been attributed to higher domestic air fares. Can. Dept. of Fin.
by charters. They were cheap and accessible, for the regulatory "fences" were now insufficiently high to stop increasing numbers of business travellers from using charters. Such low priced charters were not available on domestic routes, but within the year this had changed.

The growth of international air charters was spectacular in the decade of the 1960s, and by 1971, charter travel from Canada to Europe reached two-thirds of the scheduled market.44 The acceleration in the growth occurred after 1961, when the "affinity" rules were adopted, permitting the class of license known as 9-4, which had been extended from transborder to international charter in 1954, to carry whole plane loads of passengers with an "affinity."45 In 1973, the ATC largely removed the irksomeness of many of these affinity regulations by permitting a new form of charter flight for international charter operations—Advanced Booking Charter Flights (ABCs),46 defined as "a round-trip international charter originating at one point in Canada, destined for one point in a foreign country and terminating at the originating point in Canada." Charter travel had received a further boost, but only on international routes. On domestic routes, carriers were prohibited from offering charter services across the scheduled routes of other carriers. In return a carrier received the same protection from other carriers.47

Scheduled carriers responded in international routes by flying part charters, in which they offered seats on scheduled flights at conditions and rules competitive with charters. This was facilitated by the deploy-

44. Objection filed by CP Air, Nordair Ltd, Pacific Western Lts., Transair Ltd. and the Vancouver Board of Trade to the proposed acquisition by Air Canada of an interest in Wardair Canada Lts. by the purchase of one-third of the issued common shares of Wardair Canada Lts., and later certain non-voting proposed shares (to be issued). (C.T.C.) A.T.C. Decision No. 3566, 5, 6 (March 23, 1973).
45. Spalding, Civil Aviation Policy in Canada and Its Effect on International and Domestic Charter Services, in PERSPECTIVES ON CANADIAN AIRLINE REGULATION 65, 70–71 (1979). "In 1951 the Air Transport Board established a class of license known as Class 9–4 to permit the operation of international charter services [on U.S. transborder routes.] In 1954 this license authority was clearly by the Air Transport Board for other international charters." Id. at 70.
47. Greig, Regional Air Carrier Study, CANADIAN TRANSPORT COMMISSION RESEARCH BRANCH REPORT NO. 40-77-2 at 55 (1977). "Prior to 1968, route protection was administered under Air Transport Board General Order #5/51 granting blanket protection to most carriers operating domestic (Class 1 and 2) and international (Class 8 and 9.2) commercial air services. . . . In 1971, . . . amendments were added to each domestic charter license so as to protect domestic scheduled services. . . . [Domestic] Inclusive tours [were] subject to Section 17 of the Air Carrier Regulations [CAN. ON. REG. ch. 3, Part II (1978)]. Under the section, . . . [they had to] meet the same requirements . . . as international inclusive tours." Id. at 55-56. [The ATC, however], when considering an application, could take "into account the effect of the charter operation on scheduled air services provided to, or near, points identified in the inclusive tour itinerary." Id. at 56.
ment of surplus seat management programs, developed principally by Boeing, allowing carriers to accurately predict the revenue derived from selling at discount rates. On their domestic transcontinental routes, they offered a limited number of discount fares comparable to ABCs—known as Charter Class Canada Fares (CCCFs). A cabinet decision of January 19, 1978, however, broke the route protection by permitting any carrier holding an appropriate license to offer interregional ABCs on scheduled services.\textsuperscript{48} This permitted carriers holding licenses to apply for the right to participate in interregional ABCs without giving the two national carriers any primary right to the operation of additional interregional ABCs.

Despite access to the interregional domestic routes the regionals stayed within their boundaries, preferring to charter to their established markets in Florida and the Caribbean rather than facing the counterattacks from the nationals. It was a specialist charter operator, Wardair, who was to offer the most significant challenge to the nationals on their long-haul domestic routes.

VI. THE CHALLENGE OF WARDAIR

In January 1978, Wardair, Canada’s largest charter operator, did not hold a domestic charter license. With an expanded jet fleet,\textsuperscript{49} however, the carrier fought back against the scheduled carriers on international routes. In late 1978, Wardair defied the Air Carrier Regulations by offering multi-origin and destination flights and mixed ABCs and Inclusive Tour rates on the same aircraft. The offers met with a ready response from the public, such that on July 27, 1979, the Review Committee of the CTC permitted Wardair to continue its multiple pick-ups in Canada.\textsuperscript{50} On August 16, 1979, Wardair was issued a domestic charter license.\textsuperscript{51} While on December 29, 1979, amendments were made to the Air Carrier Regulations easing the conditions attached to the ABCs and allowing carriers such as Wardair, to sell domestic ABCs through partly or wholly owned charters.\textsuperscript{52} On May 8, 1980, Wardair began its domestic ABC fights.

\textsuperscript{48} P.C. 168 (Jan. 19, 1978). The Cabinet varied the A.T.C. Decision No. 5369 (Dec. 6, 1977), which had allowed Air Canada and CP Air to mount a maximum of 25 interregional return flight ABC’s between points on their present licenses. Regional carriers were allowed to operate domestic ABC’s.

\textsuperscript{49} In the Matter of Wardair Canada (1975) Ltd. Applications for Consolidations of certain ABC Charter programs and Requests for Relief in letter to the Minister of Transport and President of the Canadian Transport Commission. (C.T.C.) A.T.C. Decision No. 5785 (Apr. 18, 1979).

\textsuperscript{50} In the Matter of an application by Wardair Canada (1975) Ltd. for review and rescission of ATC Decision No. 5864. C.T.C. Review Committee Decision File No. 63-3/79 (July 27, 1979).


\textsuperscript{52} SOR 80-148, Can. Gaz., Part II, 464-78 (Feb. 27, 1980).
The licensing of domestic ABCs activated controversy over the so-called "stimulation/division" issue, namely whether low priced tours would substantially divert passengers from regular fares—or whether they would attract passengers who would not have flown at the regular rates. "Fences," designed to limit the extent of the division from regular fares, became the center of controversy and of examination by the ATC. The nationals were the most vociferous opponents of domestic charters, arguing that their supply would divert regular fare paying passengers, causing drops in average revenue of long-haul routes, and in turn forcing service reduction on less profitable routes. Instead of offering ABC charters, however, the national carriers targeted the nonbusiness market by offering close substitutes at competitive rates. So successful have been these substitutes at capturing the nonbusiness market, that the use of "fences" has shifted from that of containing the diversion from regular to low fares, to that of establishing comparability between promotional fares on scheduled flights and charter fares.

The nationals countered the threat of domestic ABCs with two competing substitutes. Before the appearance of domestic ABCs both C.P. Air and Air Canada had offered, at low prices, the entire seats on selected flights. Air Canada’s Nighthawk, introduced on June 12, 1978, required a minimum and a maximum stay, while C.P. Air’s Skybus charged 45 per cent of the regular economy price in return for a non-frills service operating three times a week on the major transcontinental routes. The national’s most competitive substitutes, however, have been the low fare offered on their regular scheduled flights. Designated as charter class fares, CCCFs were in effect surplus seats offered on regular scheduled flights, and prices at or near marginal cost. It took only a little while for the nationals to further deploy their surplus seat management programs by offering low prices during the seasonal, weekly, and daily off-peaks.

In October 1980, the operators of domestic ABCs faced another competing product, with the extension of the Skybus to regularly scheduled flights on selected city-pairs. Instead of dedicating an entire aircraft to the product, a fixed capacity section was allocated to the sole use of the low-priced product. Operators of domestic ABCs countered by pressuring for lower prices, and for the right to sell a large proportion of seats on their charter flights without a prebooking deadline—known as "top-off seats." "Fences" were steadily reduced (see Table 1). In February 1980, as a result of an easing on the restrictions on domestic ABCs, up to one third of the seats were "top-offs" although there were restrictions such as round-trip obligations and minimum stay requirements.

The competition between the nationals and the charter carriers for the nonbusiness market resulted in a convergence in the products offered. The national’s operated part charters, in which they allocated
seats on their scheduled flights at rates and conditions competitive with charters, while the charter carriers offered seats on their flights which were competitive with the lower priced scheduled seats. There was some question, as the Chairman of the CTC stated, as to "whether or not the maintenance of regulations that preserved a real distinction between conventional unit toll services and specialized services catering primarily to the leisure traveler still hold." 53

Although in 1980, of the low-priced seats supplied, only 5.6 per cent were domestic charters,54 their entry along with the removal of the restrictions on C.P. Air, had played a part on lowering the fares on the transcontinental routes. Between 1977 and 1980, on routes of 2400 km, regular economy fares had fallen by 3.6 per cent, and on routes of 6000 km, by 1.2 per cent.55 In contrast, on the shorter haul routes, there were few domestic charters of CCCFs, and this was reflected in rises in economy fares over the period 1977 to 1980,56 and in fare structures which offered few low-cost seats for the traveller. This in turn reflected the fact that the regionals on the shorter and medium-haul interregional routes by offering domestic ABCs, chose to remain within their regional boundaries, flying international charters to the sunny South during the winter months. The competitive domestic charters had come from Wardair. This carrier had supplied 62 per cent of the domestic charter seats in 1980, while Nordair and PWA supplied only 2.3 and 35.7 per cent respectively.57

While few regionals were tempted to compete against the nationals by offering domestic charters, a number chose to enter the national’s routes by seeking licenses to operate scheduled services. Their success in obtaining licenses, however, resulted in a lack of congruence between their actual operations and those established in the 1966 Regional Air Carrier Policy. There was the inevitable call for a clarification of the role of the nationals and the regionals, but more significantly, it introduced the general issue of how far the industry should be regulated.

VII. EMERGENCE OF COMPETITION

The carefully drawn regional boundaries of 1969 started to crack in 1978. Three years later all the regional carriers served Toronto. Instead

53. Address by the Hon. E.J. Benson, President of the C.T.C. Conference on Regulation in Transition, McGill University Management Institute, Canadian (Nov. 11-13, 1981).
55. Id. at 42, table 4.1. Economy Fair Index, July fares, 1970 dollars.
56. Id. The economy fares on routes of 300 km length rose by 4.8%, and by 1.1% on routes of 600 km.
of flying predominantly north-south routes, all the regionals had started flying east-west by entering the mainline routes of the national carriers. At the start of 1978 there were five regional carriers; a year later there were only four, following the merger of PWA and Transair. In the same year, Nordair became a subsidiary of Air Canada, leaving Quebecair as the then only regional carrier independent of either the national airlines or the provincial governments.

The start of substantial change came with the growing financial weakness of Transair and its subsequent merger with PWA. Transair, a Winnipeg-based regional carrier serving Manitoba, points in the Northwest Territories and points west of Winnipeg to Toronto, encountered financial difficulties in the mid-seventies. As part of its agreement to purchase Transair, PWA approached Air Canada in 1977 with the suggestion that it would seek permission to serve Edmonton, Calgary, Regina and Saskatchewan so that it would have linkage from Vancouver to Edmonton and Calgary to Regina, and Saskatoon to Winnipeg. Air Canada agreed as long as Transair would cancel its licenses to serve points east, from Winnipeg through to Toronto, and that the Winnipeg-Calgary and Winnipeg-Edmonton routes would involve at least one stop. On the latter routes, in return, Air Canada promised to "accommodate" Transair, by reducing its frequencies. PWA agreed to the terms and sought approval from the ATC.

In its Decision No. 5450, of April 7, 1978, the ATC ruled that the respective licenses of Transair and PWA would be operated independently, and invoked the restrictions requested by Air Canada in its letter of agreement with PWA. As for Transair’s routes east of Winnipeg, the ATC granted Nordair in July, 1978 authority to serve Toronto, Sault Ste-Marie, Thunder Bay, Dryden and Winnipeg. The ATC, found it to be "more in

58. In the matter of; (1) The proposed acquisition by Pacific Western Airlines Ltd. of an interest in the business or undertaking by Transair Limited by Purchase of 2,245,797 common shares without par value in the capital stock of Transair Limited, thereby effecting a change of control of that company; (2) An application by Transair Limited for Authority to serve the additional points Regina and Saskatoon, Saskatchewan, and Calgary and Edmonton, Alberta, under License No. A.T.C. 1788/68(S). (C.T.C.) ATC Decision No. 5450, 6 (April 7, 1978).

59. In its letter of agreement with PWA, Air Canada stated that the "Regional Air Carrier policy of 1966 requires it to recognize the supporting role of the regional carrier and make appropriate provision on the competitive segment accordingly." Id. at 6.

60. In the matter of (1) An Application by Nordair Ltd. for Authority to Serve Certain Additional Points in Ontario and Manitoba, (2) An Application by Great Lakes Airline Ltd. to Serve Certain Points in Ontario and Manitoba, and to Amend Condition No. 1 of License No. A.T.C. 1641/66 (NS) by Deleting the Restriction as to the Number and Type of Group E Aircraft Which may be Operated Under said License, (3) An Application by CP Air for the Addition of the Point Thunder Bay, Ontario, as a Point to be Served Under License No. A.T.C. 979/59. Authorizing the Operation of Class 1 Scheduled Commercial Air Service to Provide for the Carriage of Passengers, Cargo and Mail between the Points Vancouver, B.C.; Calgary and Edmonton, Alberta;
the public interest to have another air carrier or carriers operating between Winnipeg and Toronto, than to have some combination of PWA and Transair, controlled by the Province of Alberta, operating from Victoria to Toronto."\(^{61}\) On the same day the ATC refused to disallow the merger takeover of Nordair by Air Canada.\(^{62}\) The Governor in Council affirmed the decision in November, 1978.\(^{63}\)

The acquisition of Transair by PWA gave a provincial Crown corporation control of two regional carriers serving four western provinces and the Northwest Territories.\(^{64}\) If PWA had retained the Winnipeg-Toronto segment of Transairs’ licenses, it would, in effect, have become their transcontinental carrier. The ATC was not prepared to accept such an outcome. Instead, in upholding Air Canada’s purchase of Nordair, the Chairman of the ATC argued that it was in the public interest to have a “strong regional carrier in the east, operating from Winnipeg to Montreal.”\(^{65}\) There was a dispute over whether Nordair would remain independent from Air Canada, and able, in principle, to compete on jointly operated routes. In response to this dispute, the federal government announced that as soon as the acquisition was completed, Air Canada would be required to hand over the Nordair shares to the federal government so as to maintain the independence of Nordair. The federal government also promised to return Nordair to private owners after a few years.\(^{66}\)

As part of its service to Winnipeg, the Committee also allowed


\(^{62}\) In the Matter of the Proposed Acquisition of Interest in the Business or Undertaking of Nordair Ltd.—Nordair Ltd. by Air Canada. Air Canada Proposes to Purchase all the Outstanding Shares of Nordair Ltd.—Nordair Ltd., thereby Effecting a Change of Control of that Company. (C.T.C.) A.T.C. Decision No. 5539 (July 28, 1978).

\(^{63}\) Order in Council, P.C. 3389 (Nov. 6, 1978).

\(^{64}\) The two carriers were actually merged in 1979. The A.T.C. approved on August 9, 1979, the full merger of PWA and Transair under which only PWA’s identity would remain. On November 29, 1979, Transair Ltd. became a wholly-owned subsidiary of PWA. Air Transport Committee Order No. 1979-A-559, (Aug. 9, 1979).

\(^{65}\) (C.T.C.) A.T.C. Decision No. 5539 supra note 62, at B-1.

\(^{66}\) Note that the statement suggesting Nordair would be returned to the private sector was not contained in the Order in Council. Rather, it was mentioned by the Hon. Otto Lang, then Minister of Transport, that he had confidence Nordair would be returned to the private sector within one year. There was no indication, however, that it was the policy of, or that it was a commitment from, the government. Sevens, \textit{Aweird decisions}, GLOBE AND MAIL, Nov. 8, 1978, at 6.
Nordair to operate the Montreal to Toronto route, and in so doing, introduced competition by a regional on a route which had been considered to be one of the national’s mainline route. Nordair entered the route in February 1978, followed two years later by Quebecair, which meant that in the summer of 1981, there were two regionals and the two nationals competing on this mainline route. By this time, however, the provincial government of Quebec had acquired a financial interest in Quebecair.67

On January 12, 1981, the ATC, in its Decision No. 6333, authorized PWA to serve Calgary-Brandon-Toronto for an experimental two year period. By this decision, PWA had in effect moved up a level and was able to compete directly with Air Canada in providing regional services to the West.68

In June 1980, a decision was made which involved more than allowing a regional carrier to enter the mainline routes of the nationals; it permitted a regional carrier to operate nonstop over a mainline route which traversed beyond its adjacent region. The route was the tenth largest city-pair in Canada in 1978, the Toronto to Halifax route, and the carrier was EPA.69

C.P. Air had been encouraged in November 1978 by the Minister of Transport, the Honourable Otto Lang, to extend eastward beyond Montreal into the Maritimes.70 As a result of its application, C.P. Air won permission to operate a nonstop scheduled service between Toronto and Halifax in competition with Air Canada. In the same decision, No. 6099, April 9, 1980, the ATC also permitted C.P. Air to operate with a stop between Montreal and Halifax. EPA’s application to service the Halifax-Toronto route was refused because the ATC concluded that the 1969 Regional Air policy was a “policy impediment” in that Toronto was in a

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67. Lemah Inc. owns 34%, Exidex 21%, Societe d’Investissement Desjardins 33% and Corporation Ltee 12% of the issued common stock. “The [Quebec] government injected $15 million into the airline in July 1981, by pouring $10.5 million into its general fund and taking the rest as preferred shares. Province Admits to $37 million Stake in Quebecair, Dec. 8, 1982 at B1, col.3.

Since then, the province has given Quebecair loans and loan guarantees worth $11 million.”


69. (C.T.C.)A.T.C. Decision No. 6099 (April 9, 1980).

region adjacent to the one in which EPA operates.\(^{71}\)

On June 27, 1980, by Order in Council, the decision No. 6099 of the ATC was varied so as to permit EPA to fly nonstop between Halifax and Toronto, while C.P. Air was required to do so without intermediate stop.\(^{72}\) EPA had presented a strong argument that it required this service to finance the replacement of its aircraft and to generate funds for a number of its loss making interregional routes. In granting the nonstop Toronto to Halifax route to EPA, however, the Governor in Council overturned not only what had been interpreted by C.P. Air as government support to engage in transcontinental competition with Air Canada, but also broke the 1969 policy statement that restricted the regionals’ interregional expansion to communities adjacent to their regions.

By 1981, the protective regulatory policy, founded on geographic divisions, preferred vehicles and route protection, had been substantially eroded. Almost unrestricted competition on transcontinental routes had occurred. Regional boundaries had been breached, threatening the protection of preferred vehicles and the preservation of their charter markets. The ensuing increase in competition\(^{73}\) exposed the weakness of the regional carriers in Central Canada, and hastened their transfer from private to government ownership. The financial weakness of the regionals, however, had been made apparent in the mid-seventies, following the downturn in the economy. Transair and EPA had made large losses\(^{74}\) during this period. In 1980, Quebecair incurred an operating loss of over $1.4 million,\(^{75}\) but in contrast, Nordair continued to be profitable.\(^{76}\)

The poor financial performance of such carriers as EPA, Quebecair and Transair suggested that the 1966 Regional Air Carrier Policy was less than successful at increasing and stabilizing the revenue of the regionals. Encouraged to expand into international charter markets, the regionals had acquired long and medium-haul jet equipment, which was largely unsuitable for short-haul domestic routes. Interest payments increased, operating margins narrowed, leaving profits vulnerable to small changes in costs and revenues.\(^{77}\) Competition with the nationals for unionized flight

\(^{71}\) Supra note 69.

\(^{72}\) P.C. 1980-1979 (June 27, 1980).

\(^{73}\) “[B]y 1979 half of the 168 Canadian city-pair markets with more than 10,000 trips per year had been authorized for service by more than one carrier, an increase of 12 percent over 1977 . . . . [There was] a doubling, from 22 to 48, in the number of multiple-authority city-pair markets in which two carriers were authorized to engage in head-to-head (i.e., unrestricted competition.”] Transport Canada, supra note 26, at 123.

\(^{74}\) EPA and Transair incurred losses in 1975. Greig, supra note 47, at 118-19.

\(^{75}\) Statistics Canada, Air Carrier Financial Statements, 16-17 (1980).


\(^{77}\) Greig, supra note 47, at 99.
and maintenance personnel pushed input costs upward toward the levels of the nationals. They paid more for fuel than the nationals. The international charter market accounted for a growing share of the regionals’ revenues, leaving them vulnerable to changes in these markets. Quebecair and Nordair were particularly vulnerable, with approximately 72 and 64 per cent respectively of their total system revenue miles accounted for by charter operations.

In 1978, the regionals’ charter services on the transatlantic market met with increasing competition from scheduled carriers offering low discount fares. The regionals, and particularly Quebecair and Nordair, retreated to their Southern (Caribbean, Central and South America) and Floridian markets, only to face competition from American carriers and the nationals, who offered low discount prices. For the regionals in Central Canada, the charter market had started to decline (see Table 2). Their domestic operations were also confined to a region which although it contained a high number of dense routes was the hub of Air Canada’s mainline routes.

The poor performance of the regionals, however, was influenced not only by the failure of the Regional Air Carrier Policy to diversify and sustain their revenues, but also by their disadvantageous position vis-a-vis Air Canada, which entered into competition from the advantageous position of being “first among equals.” Although, subject to the licensing authority of the CTC in 1977, it was not confined, as were the regional carriers, within regional boundaries. It was the dominant “omnibus” carrier, already operating in all but eight of the 50 largest markets. As a scheduled carrier it was also aided in the defense of its market shares, for it had the advantage over charter operators, who were subject to the

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78. The “data indicate that mean domestic fuel prices paid by the regional carriers ranged between 7.7 to 15.1 percent higher than the prices paid by the [National] carriers.” Jordan, Performance of Regulated Canadian Airlines in Domestic and Transborder Operations in Research Monograph No. 12, Bureau of Competition Policy, Consumer & Corporate Affairs Canada, 104 (1982).

79. Id. at 38 and 39, Table 7.

80. The traffic data for the nationals is not broken down for the two national carriers, and hence the actual traffic movements of Air Canada in the domestic schedule and charter markets cannot be exactly identified. The table shows, however, the considerable drops in the average annual dates of growth of traffic of Quebecair over the period 1975-80 and the drops in charter traffic growth for Nordair over the same period. Quebecair’s average annual passenger revenue miles flown on charter services fell by 16.4%, while Nordair growth was reduced to 6.1%, when it had averaged 23.5% over the period 1966-75.

81. Of the city pairs exceeding 10,000 outbound and inbound passengers in 1980, nine of the top 30 ranked by volume, were in the Ontario-Quebec region, accounting for 18% of the total traffic. Of the top 10 city pairs, seven involved Toronto. Statistics Canada, Air Passenger Origin and Destination [Domestic Report] (1980).

82. The figures are for 1977, and are taken from Canadian Transport Commission Research Branch, Unit Toll Licenses And Airline Conduct—The Extent Of Competition.
charter rules embodied in the Air Carrier Regulations, in being able to deploy, with less administrative delays, promotional fares, such as CFFS, and in providing attractive part-chararters on scheduled flights. The charter operators claimed that the advantages enjoyed by Air Canada, of having a large share of the scheduled market and the facility of swiftly responding to charter fares, permitted the Crown corporation to threaten charter competing carriers with predatory pricing.

As well as defending its domestic markets, Air Canada moved aggressively into international vacation markets. Taking advantage of the provisions of the Air Canada Act, it formed a tour company, Touram Inc., and proceeded to offer competitive tour packages to the major winter tourist markets. Diversification included the purchase of a share in a company, Guiness Port Aviation Ltd., which was involved in the sale, leasing and financing of aircraft. Revenues from operations other than flying, including the company's reservation system, maintenance, ground services, and computer contracting and the credit card operation enroute, totalled almost $146 million in 1981, and made a major contribution to profits.

Air Canada's acquisition of Nordair appears to have been a defensive move, aimed at easing entry into the charter market. Although Nordair was offering alternative scheduled services to Air Canada on the Toronto-Ottawa-Montreal triangle, it had a much more significant presence in the charter markets on such routes as Toronto and Montreal to Florida and Montreal to Jamaica. Acquiescence was achieved by acquisition, which in turn was facilitated by the offer of sale, prompted, it was said at the CTC hearing, by the inadequate real return on capital and the political uncertainty in Quebec. It would also appear that following the financial difficulties of Quebecair in 1980, Transport Canada intended to use Nordair to acquire Quebecair, with the intention of merging the air services in Quebec. The offer for Quebecair made by Air Canada in 1981 was rejected, and instead, the Quebec Government stepped in by...
purchasing $15 million preference shares. In the following winter season, Quebecair was knocked out of the Montreal-Florida charter after intense competition from Air Canada's "Sun Charters." Suntours, the largest tourist retailer in Canada, and an opponent of Air Canada's acquisition of Nordair, went bankrupt, leaving the Montreal-Florida market primarily to two tourist operator, Touram (Air Canada) and Treasure Tours (Nordair).

By the summer of 1981, in the words of the President of the CTC, "competition between air carriers has stolen in on little cats feet and so subtly that many people are not even aware that it has happened."99 The policy makers, however, were well aware, for the financial involvement of the Quebec government in Quebecair indicated the extent to which the Regional Air Carrier Policy had disintegrated. Regional carriers were no longer confined within their geographic boundaries. The demarcation between National and Charter carriers had blurred, as they competed on transcontinental routes by supplying very similar services. The response of the policy makers was to keep the aviation map and merely to redraw the lines.

VIII. ALTERNATIVE POLICIES

A. FINE TUNING THE STATUS QUO

In August 1981, Transport Canada presented its proposal for a domestic air carrier policy,90 arguing that the uncertainty, caused in particular by the erosion of the Regional air carrier policy, necessitated a policy defining the carriers' roles. The policy was designed to provide a general and flexible framework for the regulatory agency's decision.91 It was to do this by defining relationships among the three groups of carriers in terms of the areas and kinds of routes where they could compete. It did not limit the permissible amount of competition among carriers. The latter would be decided by the CTC in light of particular circumstances, including any future policy on competition.92

The proposed policy was, in the words of a departmental representative, "an attempt to fine tune the status quo."93 Under the proposal, the regulatory function of the CTC would remain unchanged in that all carriers would still be required to obtain approval for entry, exit, changes in operating restrictions, fare changes and acquisitions and mergers. The paper defined the roles of the carriers such that they corresponded closely with

89. Benson, supra note 53, at 10.
91. Id.
92. Id. at 15 para. 39(2) at 14, para. 38, 16, para. 40.
their existing roles. There were to be no increases in national or regional carriers. There was to be no change in the role of charter carriers, although the paper did state this arrangement depends on "the maintenance of regulations that preserved a real distinction between conventional unit toll services and specialized services catering primarily to the leisure traveler."^94

The national carriers were to retain their present "omnibus role", providing scheduled services on any route in southern Canada (i.e., south of the 60° N latitude) suitable for the operation of large aircraft. They would not be allowed to operate scheduled services in areas north of 60° N latitude. Only the national carriers would be allowed to operate interregional services and nonstop jet services in southern Canada between city-pairs in excess of 800 miles. In southern Canada, regionals would be allowed to operate nonstop scheduled jet services between city-pairs of up to 800 miles within their respective regions. The regions were to be redrawn: EPA, Nordair, and Quebecair would be allowed to operate up to and east of a dividing line running through Winnipeg and Resolute Bay; PWA would be allowed to operate up to, and east of that line. Between interregional city-pairs more than 800 miles apart, the regionals would be allowed to operate flights only with one or more intermediate stops. They would not be allowed to operate east-west interregional scheduled services, with or without intermediate stops. Local carriers would be allowed to provide scheduled passenger and cargo services on any routes in Canada, using, however, only nonjet equipment. They would be permitted to use jet equipment for all other cargo services.^95

Although, the paper argued that the proposal "provide the potential for greater competition between regional and national carriers",^96 it remained silent on the policy that the CTC should pursue with respect to competition. By redefining the physical limits within which each type of carrier should be allowed to operate, and by upholding the test to public convenience and necessity administered by the CTC, the paper proposed the continuation of the rigid control over market entry and the division of the market between existing scheduled carriers. Implicit in the policy was an understanding that the future growth of the air transport market would be less than in the past, such that rapid growth for one carrier could only come at the expense of others.^97 Deregulation was eschewed, for it was argued that all airline markets in Canada (including transcontinental) "remain relatively low-density by U.S. standards, so that the negative effects

94.  Transport Canada, supra note 86, at 20.
95.  Id. at 16-20.
96.  Id. at 20.
97.  These "implicit" assumptions were spelled out by a Department of Transport official. Address by J. Lovink, Air Transport Assoc. of Canada, Annual Meeting, (Nov. 2, 1981).
of possible over-competition are more of a concern than they are in the U.S.\textsuperscript{98}

B. COMPETITION WITHIN A REGULATED ENVIRONMENT

All except the nationals disliked the status quo. As a result, on December 15, 1981, the Minister of Transport presented the House of Commons Standing Committee on Transport an order of Reference to study and make recommendations relating to Transport Canada's Proposed Domestic Air Carrier Policy. On April 6, 1982, the Committee, comprised of members from the three Parties, tabled its document, entitled Domestic Air Carrier Policy.\textsuperscript{99}

The Committee advocated a "regime that should increase competition within a regulated environment."\textsuperscript{100} Unlike the proposal of Transport Canada, the Committee was explicit in its guidance to the CTC (see Table 3 for the contrasts between the two proposals). They were to "rely on competition as the principle means of promoting the objectives."\textsuperscript{101} Accordingly, the Committee recommended that except on long-haul routes exceeding 1,500 miles, which would remain the preserve of the nationals, carriers, whether local, regional or newly established, would be free to apply for operating certificates for scheduled passenger or cargo services. In recommending such an entry policy, the Committee rejected the prescribed roles for the carriers contained in Transport Canada's proposals, on the grounds that such rigidity would "seriously impede the efficient development of the industry and would deny the traveling public the most desirable choices of services and fares."\textsuperscript{102} The CTC was recommended to encourage price competition by defining a "zone of flexibility within which carriers would be allowed to vary their fares upward or downward with no other requirement than a short notice to the CTC."\textsuperscript{103}

Although the extent of competition would appear to be limited by the protection afforded the nationals on their long-haul routes, the Committee's recommendations to lower the restrictions on charter and to "ensure that fair competition is maintained between ABC's and low cost fares offered by scheduled carrier,"\textsuperscript{104} would make the protection ineffective. The Committee recommended that "the Air Carrier Regulations should be amended to include a provision requiring scheduled carriers to state

\textsuperscript{98} Id.


\textsuperscript{100} Id. at 21.

\textsuperscript{101} Id. at 42, recomm. 8.

\textsuperscript{102} Id. at 28.

\textsuperscript{103} Id. at 43, recomm. 9.

\textsuperscript{104} Id. at 43, recomm. 10.
clearly in their advertisements for low-costs fares the number of seats being offered at those fares on each route," 105 and that a relaxation of restrictions on charters, such as reducing the length of stay requirement and allowing one-way trips for the one-third "top-off," so that charter carriers can compete more equitably in low cost markets at the same time having some access to higher yield markets.106

In recommending the removal of geographical entry restrictions while at the same time upholding the discretion of the CTC as to the actual extent of entry, the Committee envisaged the emergence of a workable competitive domestic airline industry:

On short and medium-haul routes, the increased threat of entry would stimulate carrier efficiency and service. On long haul routes, the potential threat of competition from other carriers’ multi-stop services would have the same effect and, in addition, should result in more long haul, non-stop services being offered by national carriers than would be the case if this threat did not exist . . . A redistribution of market shares would take place, fleet planning strategies would be re-oriented, weaker carriers might be merged with more efficient ones, and new low-cost carriers might emerge. The proposed roles provide the flexibility that is necessary for this process of change to continue and to produce a stronger air carrier industry that provides government service at a fair price.107

The Committee also implied that its recommended competitive policy would work, despite the fact that there are only two large privately owned carriers (C.P. Air and Wardair), among the competing national, regional and charter companies, since, according to the Committee, Air Canada should retain its present role and status.108 Although the Committee mentioned the concerns of some witnesses regarding the implications of provincial ownership for a workably competitive industry, change was not recommended.

C. One-Way Swinging Gate

The Economic Council of Canada had addressed the issue of government ownership in its report, Reforming Regulation, published in June 1981.109 The Council recommended a phased deregulation of entry and

105. Id. at 43, recomm. 11.
106. Id. at 42, recomm. 7.
107. Id. at 31, 32.
108. "The Committee proposes no change in Air Canada’s role or status at this time." It did not list this as one of its recommendations, id. at 32.
109. Economic Council Of Canada Reforming Regulation (1981). The Report was in response to a request from the First Ministers (Premiers of the Provinces and the Prime Minister) after a third February 1978 meeting that the Economic Council, in consultation with both the provinces and the private sector should review all questions of governmental economic regulations to determine recommendations for action.
fare authorization.\textsuperscript{110} In the case of entry, a "one-way swinging gate" approach was recommended, under which existing or new regional, charter or local carriers could freely enter and service any domestic market served by a national carrier, but neither of the nationals would be allowed to enter domestic routes served by a regional of local carrier. Each of the two national carriers would be free to serve any new point or any point currently served by the other within Canada. As entry deregulation was expected to result in the national and regional carriers' existing from unremunerative routes, the Council recommended an abandonment procedure designed to facilitate a shift from larger to smaller carriers or from internally subsidized to government-subsidized service. Carriers were recommended to establish their own fares, subject only to an upper limit established by the CTC; regulations, and in particular minimum stay and advance booking requirements pertaining to domestic and international charter operations and charter-class fares, were recommended to be less restrictive.

The purpose of the asymmetric approach to entry was to give the weaker regional and local carriers time to adjust without having to encounter increased competition on their own routes from the larger and more financially sound nationals. Similarly, the Council recognized the government-owned carriers. As it was an advantage which could significantly affect the workings of a deregulated industry, the Council recommended that government-owned carriers should not be able to call upon additional government financing of persistent deficits, but they should be reimbursed by an overt subsidy, on a non-discriminatory basis, for operating at a higher level of service or on routes that they would not otherwise service.\textsuperscript{111}

IX. CONCLUSION—THE CONTINUING STATUS QUO

After almost a year of deliberation, the Minister of Transport announced he could not accept the Standing Committee's main recommendation. Instead, he suggested the "status quo is continuing with a lot of emphasis being given to the CTC in the decisions we are making now, and the emphasis will be on public convenience and necessity rather than on the formalities of a clear-cut flight policy".\textsuperscript{112} The status quo will continue in that the CTC will continue to regulate without the benefit of a clear-cut statement of the appropriate degree of competition and regulation.

\textsuperscript{110} Id. at ch. 4. See also, Ellison, U.S. Airline Deregulation: Implications for Canada ch. 5 (1981).
\textsuperscript{111} Economic Council of Canada, supra note 109, at 33.
necessary to achieve the desired air transport policy. Some carriers, however, have either undergone or are undergoing changes in ownership, while all have faced increasing international competition, such that their positions are far from the status quo of a year ago. So strong are these competitive forces that the Department of Transport will be compelled to make decisions concerning provincial and federal ownership and bilateral transborder agreements. The status quo will change, but not as a result of a stated change in domestic air carrier policy.

The failure to adopt either a more competitive or a redefined protectionist domestic air carrier policy reflects in large part the effects of eroded protective regulation. The erosion contributed to the demise of the privately owned regional carriers and resulted in their transfer to the public section. Air Canada has emerged to command an even more dominant position than when it entered the period of eroded protectionism. Nordair is controlled by Air Canada. Quebecair, after being the subject of negotiation between the federal government and the provincial governments of Quebec and Ontario, was purchased by the Quebec government in June 1983. There is currently only one privately owned national carrier—C.P. Air—and one regional, EPA—while Wardair, despite its presence on transcontinental routes, is a charter operator and is not "recognized" in Transport Canada's domestic (scheduled) air carrier policy. Despite considering privatization, the Government of Alberta remains the owner of PWA.

The extension of public ownership in the industry has moved to the front as an issue of policy, for it raises the question as to whether the privatization of the industry is necessary before a competitive industry could work. C.P. Air, the largest privately owned carrier, has opposed deregulation on the grounds that it would be in a disadvantageous position in competition with Air Canada. The federally owned carrier would be able to draw upon financial resources which would be inaccessible to C.P. Air. The provincial ownership of regional carriers raises the possibility of taxpayers' revenue subsidizing fares which plunge below costs in

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113. Quebec Transport Minister Michel Clair and his Ontario counterpart, James Snow, presented a scheme in August 1982 to the federal Minister of Transport to form a new private holding company, dubbed "Newco," from Nordair and shares owned by Air Canada as well as shares from Quebecair, its subsidiary Regionair. In late June 1983, the government of Quebec executed their threat. The province invested $828.2 million and will provide a $12 million annual operating subsidy for the carrier. A newly created company, Quebec Transport Co., will direct the acquired carrier. Nationalists find a new course in Campaign to save Quebecair, Montreal Gazette, Nov. 27, 1982 B-1, col. 4; Pepin OK's bid to save Quebecair, Montreal Gazette, Dec. 22, 1982 B-2, col. 3; Nationalism At Any Price, Montreal Gazette, Mar. 3, 1983, at B-2, col. 1. More Domestic Airlines To Come Under Scrutiny, Financial Post, July 2, 1983, at 4.

114. Address by Ian A. Gray, Canadian Club of Montreal (Oct. 19, 1978) (Mr. Gray was then the President and Chief Executive Officer of CP Air).
unregulated, competitive markets. In general, provincial ownership, while it may not challenge directly the jurisdiction of the federal government over the economic and safety regulation of civil aviation in Canada, presents the possibility of conflict between regulatory policy of the federal regulatory agency and the goals adopted by the provincial government for their carriers. This threat of conflict appears in part to have prompted the federal government to introduce legislation limiting the provinces and their agencies from owning more than 10 per cent of a carrier.\footnote{Corporate Shareholding Limitation Act, or S-31, received its first reading in the Senate on November 2, 1982. It would stop provinces from owning more than 10\% of pipelines and transportation companies engaged in inter-provincial and international trade. The first effect was to block Quebec from investing further in Quebecair—but there was later a specific exemption for Quebecair. It was later revealed, that one of the aims was to stop the Caisse de Depot et Placement du Quebec, the provincial agency that invests in Canadian Pacific. The Caisse held just under 10\% of C.P. Cost of "Saving Quebecair" $29 Million to Date. Montreal Gazette, Dec. 7, 1983 D-5, col. 2.} 

Despite shoring up its domestic market in Central Canada, Air Canada—and C.P. Air—face growing threats to their shares of the transborder markets from low cost carriers able to offer low fares from points within the United States but sufficiently close to the major Canadian centers to attract substantial traffic.\footnote{The first and clearest forecast of this development was given by R. Pulsifer, Reforming Regulation-Airlines Panel, 5, 6 (June 25, 1981) (unpublished manuscript).} Airports at Buffalo and Niagara near Toronto and Hamilton, Burlington International Airport in Vermont, 150 kms for Montreal, and Detroit International Airport near Windsor are being served by low-cost carriers and which are biting into the national’s (and U.S. trunk carriers) transborder market. For unlike the U.S. trunk carriers, the transborder market is of some significance for the nationals, accounting for 15 per cent of their gross revenue.\footnote{Jordan, supra note 78 at 44, table 8.} Furthermore, rather than travelling on Canadian carriers on transcontinental route to destinations in the United States, Canadian passengers have been moving, as they did in the late Seventies, to these border airports and purchasing the low-priced, off-season “fly anywhere type fares” offered by the major carriers.\footnote{For instance, although the Seattle-Tacoma International Airport is 150 miles from Vancouver, it has been attracting passengers from Vancouver, who find it advantageous to purchase low priced transcontinental seats on U.S. carriers to Buffalo, and then move over the border up to Toronto and Montreal. U.S. Airlines Tapping Canadian Market, Av. Week & Space Tech., Apr. 18, 1983, at 42.} 

The competition from substitute transcontinental and border services is clearly placing a squeeze on Canadian carriers. A more liberal bilateral agreement may allow the nationals—and the U.S. trunks—to recapture some of their markets. But it will be at a cost, for their fares will have to drop, and they will probably land at unprofitable levels. For unless the
nationals are able to bring down their costs, they will continue to be uncompetitive and lose money on these routes. The prospects for the emergence of lower cost national carriers are uncertain, for such an outcome would probably involve a restructuring of the carrier, with the development of subsidiaries operating with lower overheads and tailored for shorter haul, high frequency routes. In the case of C.P. Air, it would probably mean developing a low-cost carrier in Central Canada. Instead, it would appear probably that having lost protection on transborder and transcontinental routes, the nationals will continue to shore-up their domestic markets and in particular, their large Central Canadian market. Travellers on domestic routes will be taxed even more to pay for the increasing losses on transborder routes and the reduced margins on international routes. Air Canada is forearmed for this exercise. It has acquired the competition in Central Canada and will probably obtain federal subsidies to assist in the running of its acquisitions. It will also probably retain the subserviance of C.P. Air. Indeed, C.P. Air, hampered by the threat of competition from a federally funded Air Canada, is in a most vulnerable position, and could possibly become the target for other expanding carriers. \footnote{119. In 1982 CP Air entered servicing agreements with E.P.A., which, in effect, affords the carrier some presence in Eastern Canada. The carrier, however, remains vulnerable. For instance, Claude Taylor, Chairman of Air Canada, has argued for a "unified Canadian international air service," in which Air Canada would take all scheduled international routes, including those of CP Air that it required. Transport Canada has reviewed international air transport policy. \textit{See Canada's World Scale Airline—The Future}. Speech by Claude I. Taylor, President and Chief Executive Officer of Air Canada, to Vancouver Board of Trade, Vancouver, B.C. (Apr. 1, 1981).}

\begin{table}
\centering
\caption{Low-priced Air Fare Experiment: Chronology of Major Events}
\begin{tabular}{ll}
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February 1, 1977 & Advance purchase CCC fares on Air Canada and C.P. Air commence. \\
January 19, 1978 & Order-in-Council expanded the scope of domestic ABC's. \\
April 9, 1978 & Changes to the CCC fare; the length of haul reduced from 700 to 400 miles. \\
May 1, 1978 & C.P. Air's Courier Jet Service, requiring no advance booking, but requiring a minimum/maximum stay introduced. \\
June 24, 1978 & First domestic ABC's operated. \\
July 17, 1978 & Advance purchase requirement of CCC fare reduced from 45 to 30 days. \\
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<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tr>
<td>March 23, 1979</td>
<td>First Seat Sale fare available on both Air Canada and C.P. Air.</td>
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<tr>
<td>April 9, 1979</td>
<td>CCC fare available for off-peak, mid-week, off-peak weekend and peak season.</td>
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<tr>
<td>June 1, 1979</td>
<td>C.P. Air's Skybus starts; no advance booking or minimum/maximum stay requirement.</td>
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<tr>
<td>August 16, 1979</td>
<td>Wardair awarded a temporary Class 4 charter commercial license.</td>
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<tr>
<td>September 24, 1979</td>
<td>Second Seat Sale fare on Air Canada; easier probookings and minimum stay</td>
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<tr>
<td>December 21, 1979</td>
<td>Changes in Domestic ABC's: less restrictive regulations on advance booking</td>
</tr>
<tr>
<td>January 14, 1980</td>
<td>Winter Seat Sale fare on Air Canada; easing of advance purchase for short-haul</td>
</tr>
<tr>
<td>February 12, 1980</td>
<td>Domestic ABC's: eased restrictions; greater number of &quot;top-off&quot; seats available</td>
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<tr>
<td>April 13, 1980</td>
<td>Spring Seat Sale fare on Air Canada and C.P. Air.</td>
</tr>
<tr>
<td>May 15, 1980</td>
<td>Wardair began operating domestic ABC's.</td>
</tr>
<tr>
<td>June 1, 1990</td>
<td>C.P. Air cancelled Courier Jet, expanded Skybus service.</td>
</tr>
<tr>
<td>September 15, 1980</td>
<td>Fall Seat Sale fare on city-pair's over 1,000 miles on Air Canada and C.P. Air.</td>
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<tr>
<td>September 19, 1980</td>
<td>Eased conditions attached to CCC and Seat Sale fare.</td>
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<tr>
<td>October 26, 1980</td>
<td>C.P. Air Skybus operated as a separate component on scheduled flights.</td>
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<tr>
<td>January 17, 1981</td>
<td>Winter Seat Sale on Air Canada and C.P. Air.</td>
</tr>
<tr>
<td>April 9, 1981</td>
<td>Spring Seat Sale on Air Canada and C.P. Air.</td>
</tr>
<tr>
<td>June 6, 1981</td>
<td>New domestic advance purchase excursion fares and deep discounts on Air Canada</td>
</tr>
<tr>
<td>August 19, 1981</td>
<td>As an interim measure, domestic deep discounts commencing November 1, 1982 which</td>
</tr>
</tbody>
</table>

### Table 2
Traffic Carried by Canadian Air Carriers on Scheduled and Charter Services, 1966, 1975 and 1980

<table>
<thead>
<tr>
<th>Carriers</th>
<th>Year</th>
<th>Domestic schedule</th>
<th>All charter services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Passenger</td>
<td>Revenue passenger</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>miles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(figures in thousands)</td>
<td></td>
</tr>
<tr>
<td>The Nationals</td>
<td>1966</td>
<td>3,932</td>
<td>2,865,624</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>9,033</td>
<td>7,472,612</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>9.5%</td>
<td>11.5%</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>10,856</td>
<td>10,481,100</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>3.8%</td>
<td>7.0%</td>
</tr>
<tr>
<td>The Regionals</td>
<td>1966</td>
<td>666</td>
<td>188,329</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>3,829</td>
<td>1,172,389</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>21.5%</td>
<td>22.5%</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>6,295</td>
<td>1,905,154</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>10.4%</td>
<td>10.2%</td>
</tr>
<tr>
<td>E.P.A.</td>
<td>1966</td>
<td>102</td>
<td>26,578</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>611</td>
<td>237,775</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>22.0%</td>
<td>27.5%</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>959</td>
<td>361,498</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>9.4%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Quebecair</td>
<td>1966</td>
<td>166</td>
<td>44,609</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>577</td>
<td>172,492</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>15.9%</td>
<td>16.0%</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>720</td>
<td>179,902</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>4.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Nordair</td>
<td>1966</td>
<td>8</td>
<td>10,210</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>252</td>
<td>131,710</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>46.0%</td>
<td>33.0%</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>957</td>
<td>436,940</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>30.5%</td>
<td>27.1%</td>
</tr>
<tr>
<td>PWA</td>
<td>1966</td>
<td>300</td>
<td>77,878</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>2,041</td>
<td>476,998</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>23.5%</td>
<td>21.5%</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>3,659</td>
<td>926,824</td>
</tr>
<tr>
<td></td>
<td>aag.</td>
<td>12.4%</td>
<td>14.2%</td>
</tr>
</tbody>
</table>

1 aag. means average annual growth.
2 The figures for 1966 and 1975 include Transair.

Regional Air Carrier Study, Research Branch, Canadian Transport Commission, 1977, Table 3.3, p. 33.
Table 3
Comparisons of Proposed Domestic Air Carrier Policy:
House of Commons and Transport Canada

<table>
<thead>
<tr>
<th>TRANSPORT CANADA</th>
<th>HOUSE OF COMMONS STANDING COMMITTEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. National Carrier (restricted to Air Canada and C.P. Air) allowed to provide schedule services on any route in Southern Canada.</td>
<td>1. In Southern Canada (south of 60°N), any Canadian carrier, new or existing should be able to apply to CTC to operate any scheduled service between city-pairs up to 1,500 miles.</td>
</tr>
<tr>
<td>2. Only national carriers allowed to operate interregional services and nonstop scheduled services in Southern Canada between city-pairs more than 1,300 km apart.</td>
<td>2. New or existing carriers should be permitted to apply to operate any route in Northern Canada.</td>
</tr>
<tr>
<td>3. Regional Carriers: EPA, Nordair and Quebecair confined to east of Winnipeg; PWA to operate to the west. Allowed in Southern Canada to operate nonstop to 1,300 km apart within their regions. No limit in Northern Canada. Not allowed to operate east-west interregional scheduled services. No increase in number of regional carriers.</td>
<td>3. No restriction on size or type of aircraft.</td>
</tr>
<tr>
<td>4. Local carriers to operate scheduled services only with nonjet equipment.</td>
<td></td>
</tr>
</tbody>
</table>

FARES

<table>
<thead>
<tr>
<th>TRANSPORT CANADA</th>
<th>HOUSE OF COMMONS STANDING COMMITTEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CTC to continue to authorize fares and rates with no specific instructions as to changes in policy.</td>
<td>1. CTC to continue to authorize fare and rates.</td>
</tr>
<tr>
<td>2. Encourage competition by authorizing the CTC to define a zone of flexibility within which carriers allowed to vary fares upward or downward.</td>
<td></td>
</tr>
</tbody>
</table>
Table 3. (cont’d)

<table>
<thead>
<tr>
<th>TRANSPORT CANADA</th>
<th>HOUSE OF COMMONS STANDING COMMITTEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOMESTIC CHARTERS</td>
<td></td>
</tr>
<tr>
<td>Maintenance to regulations that</td>
<td>Restrictions on domestic charters</td>
</tr>
<tr>
<td>preserve a real distinction between</td>
<td>should be reduced, but distinction</td>
</tr>
<tr>
<td>conventional scheduled services and</td>
<td>should be maintained between charter</td>
</tr>
<tr>
<td>specialized services catering primarily to</td>
<td>and scheduled services.</td>
</tr>
<tr>
<td>the leisure traveler.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBSIDIES</td>
<td></td>
</tr>
<tr>
<td>Implicit support for the continuation of</td>
<td>Direct operating subsidies,</td>
</tr>
<tr>
<td>cross-subsidization.</td>
<td>administered by the CTC, should be</td>
</tr>
<tr>
<td></td>
<td>granted for a limited period of time.</td>
</tr>
</tbody>
</table>

Canadian Air Deregulation

WILLIAM E. THOMS*

The United States has opted for a completely open system of entry to the field of aviation. Europe, on the other hand, has a system of strict national regulation of airlines—most of which are owned by the host governments. Canada has tried for a middle ground between the Scylla of nationalized airlines and the Charybdis of uncontrolled free marketeering. In 1985, it appeared that Canada may be taking a free-market gamble in becoming the second nation to relegate economic regulation of aviation to the dustbin of history.

I. THE ERA OF REGULATION

Like most transportation undertakings in Canada, air transportation began as a duopoly of the Crown Corporation (Canadian National) and the large private entity (Canadian Pacific). Trans-Canada Airlines (TCA) began as a subsidiary of the CNR, and later became a Crown Corporation in its own right. In the 1960s this airline’s name was changed to Air Canada, a logo that fortuitously reads the same in English or in French. Canadian Pacific at first viewed the airline business as a concomitant of its

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* Professor of Law and Director, Aerospace Law Program, University of North Dakota. Research for this article was facilitated by a Faculty Research grant from the Canadian Embassy, Washington, D.C., for which the author would like to express his gratitude.


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rail lines, but experienced difficulties in obtaining authority to operate coast-to-coast traffic in competition with Trans-Canada.\textsuperscript{4} Canadian Pacific now prefers to call its airline CP Air (as part of a marketing shift that abandoned the historic name in favor of trendy logos such as CP Rail and CP Ships in the late 1960's). Canadian Pacific is the largest private enterprise in Canada, and operates the second largest airline.

In addition to the Big Two, there are several regional carriers in Canada which correspond to the "local service" airlines, such as Piedmont or Southwest in the United States. The four major regional carriers in Canada are Quebecair (financially controlled by the Quebec government), Pacific Western Airlines (owned at one time by the government of Alberta but now returned to the private sector), Nordair (currently owned by Air Canada but scheduled to be sold to private interests) and Eastern Provincial Airways (a subsidiary of CP Air).\textsuperscript{5} Until 1984, each airline was restricted to one section of the country. However, since the policy changes of that year, there has been considerable overlapping of carriers and their territories. In addition, there are smaller local service carriers and charter operators, the largest of which is Wardair.

Canada is served by the United States and other foreign airlines as well. Operation of foreign carriers into and out of Canada and authority for Canadian carriers to fly to and from foreign countries is by virtue of bilateral agreements signed by the Canadian government and the government of the destination country. Overseas operations have been entrusted to one or another of the two flag carriers: Air Canada serves London while CP Air flies to and from Amsterdam. Bilateral agreements with the United States provide by far the bulk of Canada's international air travel; some routes, such as New York-Montreal, are served by both American and Canadian airlines, while on other, less busy routes, one nation or the other has decided not to operate the service to which the bilateral agreement would entitle it.\textsuperscript{6} For example, the route between Minot, N.D. and Regina, Sask. was originally served by Norcanair, a local Saskatchewan carrier. Norcanair subsequently discontinued the service, and the route was being flown by Denver-based Frontier Airlines. Cabotage restrictions mean that local traffic within Canada cannot be handled by foreign airlines; the Frontier route mentioned above continues north of Regina to Saskatoon, but only with passengers boarding at Minot or points south thereof.

\textsuperscript{4} Bonsor, The Economic Regulation of Commerical Air Transportation, 1984 TRANSP. ECON. 59.
\textsuperscript{5} Haanappel, Deregulation of Canadian Air Transport: If It Happens, 9 ANNALS OF AIR AND SPACE LAW 59, 62 (1984).
\textsuperscript{6} Haanappel, Deregulation of Air Transport in North America and Western Europe, 91 AIR WORTHY 108 (1985).
United States carriers have been successful in attracting traffic boarding at Canadian gateways. Many suggest that the extraterritoriality agreements, which allow the United States to maintain customs and immigration agents at Canadian airports, assist American airlines in attracting and retaining through passengers from Canada who connect to other planes of the same carrier at United States hub airports. Airports in Canada serving commercial air carriers are virtually all owned by the federal government, making the government of Canada the largest owner and operator of airports in the world.7

Regulation by the Canadian Transport Commission (CTC) was pervasive in the areas of entry, exit and rates charged for air service. The Aeronautics Act8 grants to the CTC’s Air Transport Committee (ATC) the power to grant certificates to carriers to operate common carrier air service over particular routes, using the familiar criterion of public convenience and necessity.9 Tariffs containing the legal fares to be charged must be filed with the ATC for approval,10 and airline mergers are also governed by the requirement for ATC approval.11 These powers are similar to the powers exercised in the United States by the Civil Aeronautics Board (CAB) prior to deregulation, but with some important differences:

1. The CTC could control flight frequency and types of aircraft;
2. Most CTC policy is found in regulations rather than the statute;
3. The CTC is not a fully autonomous agency, as was the CAB;
4. The CTC often follows ministerial policy statements.12

Throughout the 1970’s and 1980’s, the CTC exercised traditional utility-type regulation over Canada’s airline industry. In contrast, the United States witnessed a complete dismantling of its airline regulatory system, culminating in the demise of the Civil Aeronautics Board on December 31, 1984.13 Today, no regulatory authority is required for entry into the airline business in the United States, except that only United States citizens may own airlines. Regulatory approval is still necessary for United States airlines to fly to other countries (including Canada) and for Canadian and other foreign carriers to fly to the United States.

Deregulation in the United States brought on the bankruptcy of several carriers and the replacement of the line-haul carriers with small com-

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10. Aeronautics Act, § 14(1)(m), supra note 8.
12. Haanappel, supra note 2, at 105-106.
muter airlines on many routes.\textsuperscript{14} Most airlines in the United States opted for a hub-and-spoke operation, funnelling passengers into one or two central airports and having them change aircraft. Fares were drastically lowered in highly competitive markets, mostly between larger cities. Few bargains were available in smaller towns, away from the major air hubs. Air travel rates bore little relationship to distance travelled. Canadian observers, seeing their passengers cross the border from Montreal to Burlington and Toronto to Buffalo to ride People Express (always the darling of the deregulators) suggested that Canadians would benefit from the low-cost carriers that deregulation would bring.\textsuperscript{15} Others, noting the vast distances, open spaces and unsuitability of their country for a hub-and-spoke system, wondered about the possible dislocating effects of the export of deregulation to Canada from the air transport giant to the south.\textsuperscript{16}

II. THE 1984 PROPOSALS—THE AXWORTHY AXE

In Liberal Transport Minister Lloyd Axworthy’s remarks to the Parliament on new Canadian air policy, he stated the following:

As many Canadian travellers know, it is a fact that our airlines do not always offer the kind of prices people want. I have received about 400 letters from people who want what they see as U.S.-deregulation-style prices. Canadians are also voting with their feet. A poll by the Consumers’ Association of Canada found that eleven percent of Canadian travelers began their trips in the U.S. last year. My department’s own records show at least 200,000 Canadian travellers cross the border each year. At least the bus companies are benefiting from the new traffic to Buffalo and Burlington!\textsuperscript{17}

With these words, Lloyd Axworthy kicked off Canada’s new air transport policy in May, 1984. The essence of this policy, Axworthy said, was less regulation and more competition. Since full deregulation cannot take place without a sunset law disestablishing the CTC and its role in air transport regulation, Axworthy merely directed the CTC to use its existing discretion in interpreting the public convenience and necessity to favor competition in the skies.\textsuperscript{18} A “use it or lose it” approach was adopted which directs the CTC to advise the Minister when airlines have decided to leave a route within 30 days.\textsuperscript{19} Cargo services would be dealt with in the same manner as scheduled passenger service.\textsuperscript{20} Financially fit char-

\textsuperscript{15} S. Goldenburg, supra note 3, at 148-49.
\textsuperscript{16} Haanappel, supra note 2, at 110.
\textsuperscript{17} L. Axworthy, Remarks to the Parliament on the new Canadian air policy (May 10, 1984) p. 2.
\textsuperscript{18} Haanappel, supra note 2, at 106-107.
\textsuperscript{19} Axworthy, supra note 17, at 6.
\textsuperscript{20} Id.
ter airlines, however, were freed altogether from meeting entry requirements.\textsuperscript{21}

The Transport Minister required pricing controls to be eliminated entirely on the lowering of fares within 2 years, although maximum price controls would still be in force because entry would not be totally free. In the interim period, 1984-1986, liberalization of fare policy is to be based on a continuing study of airline rates undertaken by the CTC.\textsuperscript{22} Presently, airlines may charge as little as they like for promotional fares, or even the basic coach rate, but they are limited in rate hikes and maximum fares charged, especially to remote areas and monopoly markets.

The historic division between the Big Two and regional and charter carriers was eliminated by the Axworthy statement. Henceforth, any carrier, including a formerly unscheduled charter carrier like Wardair, could apply to the CTC for any route.\textsuperscript{23} In addition, restrictions on frequency of service, nonstop service or the use of particular type of aircraft were to be eliminated from existing certificates.\textsuperscript{24} Carriers were encouraged to re-submit their licenses to the CTC to consolidate their authority to promote more competition. What about the downside of liberalized regulation—service to small communities? The Minister spoke of increased demonstration projects that would use the new Canadian-built deHavilland DASH-8 short-range aircraft.\textsuperscript{25}

The new transportation policy attempts to make better use of under used facilities, and Axworthy particularly encouraged the CTC to give favorable consideration to applications to serve Mount Hope Airport in Hamilton, which was too close to Toronto to attract much service in its own, and Mirabel Airport, which was in the vicinity of Montreal. This would make better use of these white elephants and at the same time reduce congestion at Pearson International and Dorval airports.\textsuperscript{26} In addition, airlines that had United States-Canada transborder authority but were not currently offering service were told to "use it or lose it", the implication being that the rights would be transferred to another more willing carrier if the certificate holder failed to fly the route regularly.\textsuperscript{27}

In a later development in August, 1984, Canada and the United States agreed to an "open airports" policy between the two countries.

\textsuperscript{21} Id.
\textsuperscript{22} Haanappel, supra note 2, at 107.
\textsuperscript{23} In order to emphasize this point, Axworthy in May, 1984, approved Pacific Western's application for Vancouver-Edmonton/Calgary non-stop authority that the CTC had dismissed as inappropriate for the role of a regional carrier. Axworthy, supra note 17, at 7-8.
\textsuperscript{24} Id.
\textsuperscript{25} Id. at 9.
\textsuperscript{26} Id. at 8.
\textsuperscript{27} Supra, note 2, at 108.
The policy begins on a very modest scale; only one airport is involved in each country. The United States and Canada agreed to an automatic li-
censure of any number of airlines to serve all routes from the designated airport. Thus, pursuant to this agreement, airlines can serve any points in the United States from Montreal and all points in Canada from San Jose. There are some restrictions: nonstop service to Boston, JFK Interna-
tional, O'Hare, Los Angeles, San Francisco, Miami and Seattle from Mirabel are not allowed, and all flights on this route must originate or termi-
inate at Mirabel.\textsuperscript{28} So far, there has been one taker on the Mirabel route. People Express began serving Mirabel in July, 1986, with introd-
tory fares of $29 (U.S.) on the Newark-Mirabel run,\textsuperscript{29} paralleling an Eastern Airlines-Air Canada route which regularly charged over $100 for the one-way trip. Quebec officials hoped that the influx of People's customers would bring new life to the airport which Maclean's Magazine called "a major planning disaster."\textsuperscript{30}

The same month brought a United States-Canadian agreement on commuter air services across the border, providing for an expedited pro-
cedure for the approval of transborder services by aircraft seating no more than 60 passengers with a route of no more than 400 air miles (in Central Canada) and 600 miles elsewhere (except Alaska). Automatic approval is to be given by one nation once the other has approved the transborder service.\textsuperscript{31}

The new airline policy did not apply to all of Canada. Axworthy drew a line across his country at 50 degrees north in the East and 55 degrees in the West, the city of Winnipeg being the demarcation line. South of that line, where over 90\% of the Canadian people live, the new liberalized policy would apply. To the north is the regulated zone, where the pre-1984 CTC policies would still hold forth. The reason for this is that these northern areas of little population could not withstand competition. Either a monopolist would charge exorbitantly high prices or a competitor would come in where neither could survive.\textsuperscript{32}

The Transport Minister did not provide any statutory reform, and in-

\begin{enumerate}
\item\textsuperscript{28} Department of External Affairs, no. ETT-1482, Aug. 21, 1984 (concerning experimental transborder air services program between Canada and United States).
\item\textsuperscript{29} Wallace, \textit{Rays of Hope For an Unpopular Airport}, MACLEAN'S, July 22, 1985, at 13. See N.Y. Times, Dec. 7, 1985, at 26, col. 4 (letter to editor claiming that other airlines charge Canadians between $118 and $268 to fly the New York-Montreal route. Of course, these planes leave from the conveniently located Dorval airport and fly to LaGuardia and Kennedy rather than Newark).
\item\textsuperscript{30} Wallace, \textit{supra}, note 29.
\item\textsuperscript{31} Department of External Affairs, no. ETT-1483, Aug. 21, 1984 (concerning additional transborder services of a regional, local, and commuter nature between Canada and United States).
\item\textsuperscript{32} For example, in markets like Winnipeg-Churchill, where there are no roads, common
deed, it would have been unwise to do so in view of the precarious nature of his government, which was rously defeated in a few month’s time; Axworthy and his erstwhile chief John Turner were the only Liberal members that returned from anywhere west of Ontario. It was left to the incoming government of Brian Mulroney to approach Parliament with legislative proposals. Since 1984, airline regulation in Canada has been governed by the existing Aeronautics Act as interpreted through the ministerial guidance of Mr. Axworthy. There have been no denials or serious opposition to new applications for airline authority. The line between regional and national carriers has been erased. Although there have been no new entries, airlines now fly across Canada. Canadian Pacific has moved to acquire Eastern Provincial outright and in November, 1985, Quebecair and Pacific Western agreed on a coordination of marketing and operating aspects that would create Canada’s third largest airline.33

III. THE 1985 PROPOSALS: THE MAZANKOWSKI MAZE

The Progressive Conservative government which followed the 1984 election was also committed to liberalization of transport regulation. The government of Prime Minister Brian Mulroney was committed to the previously opposed goals of cutting transport subsidies and, with them, the national deficit, and at the same time expanding service. He managed to do this with VIA Rail Canada, replacing some passenger train routes that the Liberal government had discontinued in 1981.34 It fell to Mulroney’s Transport Minister, Don Mazankowski, to construct a blueprint for legislation which would bring United States’ style deregulation to Canada. Although at this writing not yet introduced into Parliament, the government’s White Paper (entitled “Freedom to Move”) is the best roadmap to what the Canadian transportation picture will look like in the 1990’s.35

The government’s proposals replace the National Transportation Act with a new statutory scheme. Besides air transportation, the proposals deal with interprovincial trucking, marine transportation, commodity pipelines, and railway freight. The White Paper proposes replacing the Canadian Transport Commission with a new Independent Regulatory Commission, not beholden to the Ministry of Transport, but with vastly reduced powers.36

With reward to the Axworthy proposals, the White Paper states:

33. Dumas, Quebecair et Pacific Western posent les Jalens du plus important reseau aerien interieur du Canada, Le Devoir 1 Nov. 1985, Sec. 2, p. 1.
36. VIA Rail Canada is not included in regulatory reform; that subject will be dealt with in the
The domestic airline industry has now reached the point where continued economic regulation serves largely to frustrate air carriers, shippers and the traveling public. Reform must now be continued through change in the legislative base for economic regulation. The legislation was last revised in 1967 with passage of the National Transportation Act and revisions to Part II of the Aeronautics Act. The Government now proposes to reduce economic regulation to a minimum in pursuit of the following objectives:

1. Improvement or expansion in services to the travelling and shipping public;
2. Reasonable opportunities for all sizes and types of carriers to compete in the domestic market;
3. Removal of all unnecessary expense and paper burden from industry and government alike; and
4. Encouragement of a pricing regime that provides travellers and shippers with a competitive product.\(^{37}\)

To this extent, the government proposed that the familiar test of public convenience and necessity be replaced by a “fit, willing and able” test for a certificate to be issued to a carrier. The only requirements for licensure would then be the possession of valid Department of Transportation operating certificates and liability insurance to an amount specified in regulations. As in the United States, all air carriers will be able to serve all domestic markets.\(^ {38}\)

Market exit under the government proposals will not be impeded except by a requirement of advance notice. The line of demarcation between regulated and liberalized zones, currently at 50-55 degrees north, would be eliminated. If a free market could not provide services to Canada’s northlands, presumably a direct subsidy would be required.\(^ {39}\)

There will be no ongoing regulation of domestic tariffs under the Mazankowski proposals. However, the proposed new Independent Regulatory Agency will be empowered to review fare increases (but not decreases) for unconscionability, particularly where monopoly routes are concerned.\(^ {40}\) This would be one major distinction between Canada and the United States. In the latter country, airlines can charge all that the traffic can bear. CTC aircraft-ownership and financial requirements will be done away with. Carriers can use debt financing to obtain aircraft, but will be required to have adequate liability insurance.\(^ {41}\) Specific authority over international air services will be vested in the Minister of Transport, who can also retaliate against discriminatory or unfair commercial prac-

\(^{37}\) Id. at 24.
\(^{38}\) Id. at 25-26.
\(^{39}\) Id. at 27.
\(^{40}\) Id. at 28.
\(^{41}\) Id. at 29.
ties by foreign governments or air carriers.\textsuperscript{42}

If Parliament enacts legislation along the lines of the White Paper, as is predicted, Canada’s regulatory climate will be very much like that of the United States. However, the Mulroney government has not moved quickly to enact this legislation, despite having the votes, and many suspect that what will emerge from Parliament will be less drastic than the sunset legislation which abolished the CAB.\textsuperscript{43} Deregulation seems popular enough in the United States, especially in the large cities where most of the working press is located,\textsuperscript{44} but is not popular in Europe or throughout the members of the International Air Transport Association.\textsuperscript{45} The CTC has practiced de facto deregulation in the year since the Axworthy statement, and there are few regulatory barriers in Canada’s skies today. The important differences which will remain between Canada and the United States are that the Canadian government owns all its nation’s commercial airports and the United States government owns two; the Canadian government owns a major airline and the United States government owns none. There have been policy statements that hint that Transport Canada wants to get out of the airport business, but very few statements regarding the privatization of Air Canada.\textsuperscript{46}

\textbf{IV. WHAT OF THE FUTURE?}

The Commission of the European Communities, after a four year period to study the effects of deregulation and whether it was exportable, concluded:

The United States is a large domestic market reserved to United States carriers; it was accepted policy to end governmental intervention in the market; and to accept social and economic effects of such a policy. Furthermore, the United States has 20 major carriers all operating on a commercial basis and the United States government can take a relaxed view on the fate of any one of them.\textsuperscript{47}

By contrast, over 60 percent of the traffic in Canada is carried by the Crown corporation Air Canada. The “People’s Airline” serves every province of Canada and most of the air markets in the country. Outside of breaking up Air Canada into smaller units or selling it to private interests,

\textsuperscript{42} Id. at 31-32.
\textsuperscript{43} Berton, *The Uncertain Promise of Cheap Flights*, MACLEAN’S, July 29, 1985, at 38.
\textsuperscript{46} Haanappel, *Deregulation of Canadian Air Transport: If it Happens*, 9 ANNALS OF AIR & SPACE LAW 59, 74 (1984).
\textsuperscript{47} Civil Aviation Policy (Communication and Proposals by the Commission to the Council), Com. (84), 72 Final, para. 43 (15 March 1984).
there seems no way that meaningful competition can exist between a government-owned Goliath and a number of private Davids without recourse to the public purse.\textsuperscript{48}

Canada’s geography doesn’t lend itself to a highly competitive, deregulated environment. In the United States, a route map consisting of coast-to-coast trunk lines and regional complementary airlines, looking somewhat like a map of the nation’s railway system, has been replaced with a hub-and-spoke map looking something like a giant spider’s web. Frontier flights center at Denver; Republic’s at Minneapolis, Memphis and Detroit; USAir’s at Pittsburgh; People Express’ at Newark and so on. Canada’s population and trade routes, however, are east and west, oriented along the lines of the two transcontinental railways. This is where the population is located. Indeed, if the Canadian map were drawn strictly on demographics, instead of depicting the world’s largest land mass outside the Soviet Union, it would look like Chile lying on its side. Most Canadians live within one hundred miles of the United States border. United States airlines could easily serve most of Canada as additions to their hub-and-spoke systems, but it would be difficult for Canada to be served by competing domestic carriers operating such a system.

What about the storied Great White North? Outside of Alaska, there is no United States equivalent of the flights to Churchill and Yellowknife. In the United States, airlines have concentrated on major city pairs. It is difficult to see how, absent some type of federally administered subsidy, the remote cities and villages of Canada’s north could be served at all. It is for these reasons that this writer feels that some modification will be made before complete deregulation takes place in Canadian skies.

Canadian transportation policy is just one aspect of the major issue facing the Mulroney government today—free trade policy. The Mulroney regime is on record as favoring free trade with the United States and the elimination of tariff and non-tariff barriers to the movement of goods. In connection with this policy, Canada is moving toward proposing a uniform United States-Canadian air system.\textsuperscript{49} This would include some limited cabotage rights for United States and Canadian carriers. The “open airports” policy is a small step in that direction. Whether Canada really wishes to slug it out in the United States hubs and treat the continent as one market is the big question of transborder transport. Historically, no continental market has ever been opened to carriers of different nations—even the European Community is viewed as separate nations for the purpose of airline transportation.\textsuperscript{50}

\textsuperscript{48} Supra, note 43 (quoting Marie Bernier, vice-president of public affairs for Nordair).
\textsuperscript{49} Supra, note 35, at 26.
\textsuperscript{50} A. Lowenfeld, Aviation Law, 5-112 to 5-122 (1981).
It remains to be seen if Canadian airlines are willing to leave what remains of their protected environment, and if the "People's Airline" will go to the mat with People Express for the stakes of a continental air travel market.
HAROLD A. SHERTZ ESSAY AWARD CONTEST

The Film, Air and Package Carriers Conference of the American Trucking Association, in conjunction with the Transportation Lawyers Association, in an endeavor to encourage interest within the legal education community, annually supports the Harold A. Shertz Essay Award Contest. The contest honors Harold A. Shertz, Esq., of the Philadelphia, Pennsylvania, Bar for his long service to the transportation industry and to the legal profession.

Submission of manuscripts must be in conformance with the competition’s rules as follows:

1. Eligibility:
   The contest is open to any law student of a school in the United States or Canada. An essay may be written in collaboration with another student provided there is full disclosure.

2. Subject Matter:
   A contestant may write on any area of transportation law.

3. Determination of Award:
   Essays will be judged on timeliness of the subject, practicality, originality, quality of research, and clarity of style. The Board of Governors of Transportation Law Journal shall act as judges. In the discretion of the judges, no prize may be awarded. The decision of the judges shall be final.

4. Prizes:
   A prize of $1,000.00 will be paid and the winning essay will be published in the Transportation Law Journal.

5. Right of Publication:
   Each contestant is required to assign to the Transportation Law Journal all right, title, and interest in the essay submitted, and shall certify that the essay is an original work and has not had prior publication or been accepted for publication elsewhere. Papers written as part of a contestant’s law studies are eligible provided first publication rights are assigned to the Transportation Law Journal.

6. Formal Requirements:
   Essays must be submitted in English and be typewritten (double space) on 8½” x 11” paper with 1” margins. Footnotes shall be typed separately and all citations must conform to A Uniform System of Citation 13th ed., 1982, Loreli Press, Avon, Mass. The essay shall be limited to forty pages including text and footnotes.

7. Submission Requirements:
   Three copies of the essay should be enclosed in a plain envelope and sealed. Contestant’s name should not appear on either the envelope or the essay. The envelope containing the essay should be placed in another envelope with a letter giving the name and address of the contestant and stating that the article is submitted for the contestant and that the author has read and agrees to be bound by the rules of the contest. Enclosed with this letter must be the certification set forth in Rule 5 above and a brief biographical sketch of the contestant.

8. Date of Submission:
   Address your essay to Professor Paul Stephen Dempsey, Transportation Law Program, University of Denver College of Law, 1900 Olive Street, Denver, Colorado 80220. Entries must be received prior to December 31 of the year in which eligibility is sought.
HAROLD A. SHERTZ ESSAY

Regulating the Transportation of Hazardous Materials Over The Nation's Roadways

CAROLINE J. HOGUE, Esq.*

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I. INTRODUCTION

As our society becomes increasingly dependent on chemicals and

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chemical by-products, a tremendous volume and array of chemicals must, of necessity, be shipped to their destinations via the nation’s roadways. A substantial volume of these chemicals can be classified as hazardous materials,¹ which pose risks of injury and death if released during a highway accident.

The Department of Transportation (DOT) estimates that between 100,000 and 250,000 shipments of hazardous materials are transported daily over the nation’s roadways, amounting to 4 billion tons of hazardous cargo shipped annually.² In large part, public awareness of the frequency and volume of hazardous materials being transported by roadway has come about through media reporting of accidents involving hazardous materials shipments. According to DOT statistics, 4,486 accidents involving the shipment of hazardous materials were reported in 1984.³ Although 1985 statistics have not been published as of this writing, a number of major accidents have been reported in front-page headlines in newspapers around the country. Within a one-month span in 1985, a number of these accidents caused widespread evacuation and panic in the affected vicinities. On August 12, 1985, a major chemical spill necessitated the closing of the Capitol Beltway that surrounds Washington, D.C. and the evacuation of over 600 nearby residents.⁴ In Camden, New Jersey, a truck spilled 2,500 gallons of a highly toxic chemical, anilin, into a Camden city sewer.⁵

Despite the excellent safety records of most major companies that ship hazardous materials and the comprehensive controls established in this area through enacted federal legislation, the public views shipments of hazardous materials over roadways in their communities with concern and alarm.⁶ This concern has resulted in a proliferation of additional legislation that has been enacted at both the state and local levels. This paper will serve to discuss the controls that have been placed upon the transportation of hazardous materials through federal, state and local legislation, will formulate a number of beneficial goals that might be accom-

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¹. For transportation purposes, federal legislation designates as "hazardous" any material shipped in commerce which poses an unreasonable risk to health, safety and property. Included within the defined hazard class are, inter alia, radioactive materials, etiologic agents, flammable and combustible liquids or solids, oxidizing or corrosive materials, compressed gases, poisons and explosives. Hazardous Materials Transportation Act § 1803, 49 U.S.C. § 1801-1812 (1976 & Supp. V 1981).
⁴. Id.
⁶. Fred Miller of the Environmental Policy Institute, a Washington-based private watchdog group, in publicly commenting on public concern, has stated, "The public is clearly alarmed by the prospect of Bhopal kind of chemicals coming through cities, small towns and rural communities." Reuters, Ltd., Aug. 26, 1985, v. at Wash. Dateline.
Hazardous Materials

plished through legislation, and will analyze existing legislation in light of those proposed goals.

II. DISCUSSION

A. EXISTING FEDERAL LEGISLATION

1. THE HAZARDOUS MATERIALS TRANSPORTATION ACT

Recognizing the need for comprehensive federal legislation in this area in the early 1970’s, Congress enacted the Hazardous Materials Transportation Act (HMTA)\(^7\) with the express purpose of “... protect(ing) the Nation adequately against the risks to life and property which are inherent in the transportation of hazardous materials.”\(^8\) Prior to the passage of the HMTA in 1974, a number of federal agencies, including the Federal Highway Administration, the Federal Railway Administration and the Federal Aviation Administration supervised the transportation of hazardous materials. Although the Secretary of Transportation maintained a small technical staff to advise these agencies, DOT possessed only a minimal degree of substantive control over the various modes of transportation.\(^9\) As such, regulation and enforcement of hazardous materials transportation was fragmented among various agencies, with little or no coordination of effort. The legislative history of the HMTA evidences Congressional concern over this fragmentary approach, which was sought to be remedied by unifying the government’s regulatory and enforcement powers in the Department of Transportation, which would be empowered to issue comprehensive, efficient and non-duplicative regulations for the transportation of hazardous materials over the nation’s roadways.\(^10\)

Under the HMTA, the Secretary of Transportation is afforded a broad grant of authority to:

1. designate as hazardous any material shipped in commerce which poses an unreasonable risk to health and safety and property. The materials so designated may include, inter alia, radioactive materials, etiologic agents, flammable and combustible liquids or solids, oxidizing or corrosive materials, compressed gases, poisons and explosives;\(^11\)

2. promulgate regulations governing any safety aspect of the transportation of hazardous materials which are deemed necessary and ap-


\(^8\) Id. at § 1801.


propriate, involving not only the control of routing hazardous materials shipments over designated roadways, but the packaging, handling and testing of containers used for hazardous materials, as well as the placarding or labelling and inspection of vehicles carrying hazardous materials shipments;\textsuperscript{12} and

3. enforce such regulations as against shippers, carriers, and those who manufacture, test and certify containers intended for use in the transportation of hazardous materials in commerce.\textsuperscript{13}

2. \textit{Department of Transportation Regulations}

The Department of Transportation (DOT) has been active in promulgating extensive regulations in the area of hazardous materials transportation. A number of substantive regulations predating the enactment of the HMTA (which were previously authorized by other federal legislation) have been reissued and incorporated into the growing body of regulations issued under the authority of the HMTA.\textsuperscript{14}

The Hazardous Materials Regulations\textsuperscript{15} define and list those materials deemed hazardous in transport,\textsuperscript{16} and include specific and detailed provisions for the carriage of hazardous materials by roadway.\textsuperscript{17} Requirements for the testing of containers used in shipment,\textsuperscript{18} obtaining shipping papers and certification,\textsuperscript{19} the marking and placarding of vehicles,\textsuperscript{20} the inspection of vehicles,\textsuperscript{21} the training of tank truck drivers transporting flammable liquids,\textsuperscript{22} the loading, unloading and storage of hazardous materials,\textsuperscript{23} and the immediate reporting of hazardous materials accidents\textsuperscript{24} are all set forth in great detail and specificity. The transporting of certain extremely hazardous materials by common carrier is prohibited altogether.\textsuperscript{25} The hazardous materials regulations establish a system of preferred routes for the carriage of radioactive materials, comprising the interstate highway system or state-designated routes, which consist of alternate routes designated by state routing agencies.\textsuperscript{26}

\begin{thebibliography}{99}
\bibitem{12} \textit{id.} at § 1804.
\bibitem{13} \textit{id.}
\bibitem{15} Hazardous Materials Regulations, 49 C.F.R. § 171.1-177.870 and app. A.
\bibitem{16} \textit{id.} at § 172.1-172.102 and app. A.
\bibitem{17} \textit{id.} at §§ 177.800-177.870 and app. A.
\bibitem{18} \textit{id.} at §§ 177.812, 177.813.
\bibitem{19} \textit{id.} at § 177.817.
\bibitem{20} \textit{id.} at § 177.823.
\bibitem{21} \textit{id.} at § 177.824.
\bibitem{22} \textit{id.} at § 177.816.
\bibitem{23} \textit{id.} at §§ 177.834-177.861.
\bibitem{24} \textit{id.} at § 177.807.
\bibitem{25} \textit{id.} at § 177.821.
\bibitem{26} \textit{id.} at § 177.825.
\end{thebibliography}
als regulations additionally specify that all shipments must be transported and delivered without unnecessary delay, from and including the time of commencement of the loading of cargo until its final discharge at destination.\textsuperscript{27} Recognizing the special needs of local emergency response personnel, DOT has published and distributed nationally copies of emergency response guidebooks, providing instructions based upon DOT hazard warning systems of initial actions to be taken in event of a roadway accident.\textsuperscript{28}

\textbf{B. LEGISLATION AT STATE AND LOCAL LEVELS}

\textit{1. ROLE OF STATE AND LOCAL GOVERNMENTS}

Despite the comprehensive scope and reach of the HMTA and DOT regulations promulgated thereunder, an increasing number of states and local governments have sought to enact additional legislation regulating the transportation of hazardous materials through their jurisdictions. Notwithstanding the framers' intent of creating a predominant role for the federal government (as further evidenced by the inclusion of an express preemption provision\textsuperscript{29}), Congress has recognized the need for state and local government action in certain circumstances, even where such action impacts upon interstate commerce.\textsuperscript{30} As such, the HMTA and DOT regulations have attempted to carve out a limited role for both state and local governments in the routing and traffic controls of hazardous materials shipments over state and local roadways.\textsuperscript{31} In acknowledging this role, DOT has noted that:

Despite the dominant role that Congress contemplated for Departmental standards, there are certain aspects of hazardous materials transportation that are not amenable to exclusive nationwide regulation. One example is traffic control. Although the Federal Government can regulate in order to establish certain national standards promoting the safe, smooth flow of highway traffic, maintaining this in the face of short-term disruptions is necessarily a predominantly local responsibility. Another aspect of hazardous materials transportation that is not amenable to effective nationwide regulation is the problem of safety hazards which are peculiar to a local area. To the extent that nationwide regulations do not adequately address an identified safety hazard because of unique local conditions, State or local government can regulate narrowly for the purpose of eliminating or reducing the hazard.\textsuperscript{32}

Perhaps the most obvious role relegated to state government is the

\begin{itemize}
\item \textsuperscript{27} \textit{id.} at § 177.853.
\item \textsuperscript{29} See infra, pp. 606-608.
\item \textsuperscript{31} \textit{id.}
\item \textsuperscript{32} \textit{id.}
\end{itemize}
designation of certain roadways within its state as a preferred route of travel. That such a role was not envisioned as purely a state function is evidenced by the caveat contained in DOT's definition of "state-designated route" advising that "Designation must have been preceded by substantive consultation with affected local jurisdiction . . . to ensure consideration of all impacts and continuity of designated routes."33 Accordingly, some states, while retaining the power to control routing within the jurisdiction, have expressly delegated to local government the authority to enact their own ordinances concerning routing when particular local factors or risks are involved. An example of such legislation is Pennsylvania's Hazardous Materials Transportation Act,34 which provides, in pertinent part:

The Department shall have the power to . . . adopt regulations . . . pertaining to routing and parking of vehicles, except that such regulations may not supersede ordinances of local authorities and all other factors which affect the nature or degree of risk involved in the transportation of hazardous materials.35

As such, it seems clear that both federal and state governments authorize and approve of narrowly drafted local ordinances governing the routing of hazardous materials shipments when certain local roadways are considered patently unsafe, or when other obstacles, such as badly constructed tunnels or bridges, make transportation of hazardous materials extremely dangerous.

2. Preemption under the HMTA

State and local legislation which exceeds the designated roles envisioned by the HMTA and DOT regulations is subject to strict scrutiny based upon the express preemption provision contained in the HMTA. Congress purposely included a preemption provision in the Act "... to preclude a multiplicity of State and local regulations and the potential for varying as well as conflicting regulations in the area of hazardous materials transportation."36 Under the terms of the preemption provision, inconsistent state and local regulations are preempted, with the exception of those which afford an equal or greater level of protection to the public than is afforded through the HMTA and do not unreasonably burden interstate commerce.37

In implementing the preemption language of the HMTA, an adminis-

33. 49 C.F.R. § 171.8.
35. Id. at § 8302(3).
trative forum was established in 1976 whereby state and local governments may apply to DOT for the issuance of a non-binding and appealable determination regarding the consistency of proposed legislation.\textsuperscript{38} DOT inconsistency rulings are effective in providing a viable alternative to litigation for a determination of the relationship between Federal requirements and those of a State or political subdivision thereof. Additionally, if proposed state or local legislation is deemed inconsistent, such a finding provides the basis for application to the Secretary of Transportation for a determination as to whether preemption will be waived under Section 1811 (b) of the Act.\textsuperscript{39}

Although DOT inconsistency rulings do not have the binding effect of judicial judgments, the inconsistency ruling proceedings do possess a judicial character, and case law criteria have been incorporated into the process for determining the existence of conflicts, as follows:

(1) Whether compliance with both the (non-Federal) requirement and the Act or the regulations issued under the Act is possible; and

(2) The extent to which the (non-Federal) requirement is an obstacle to the accomplishment and execution of the Act and the regulations issued under the Act.\textsuperscript{40} In further construing the inconsistency test, DOT has noted that:

The first criterion, commonly called the "dual compliance" test, concerns those non-Federal requirements which are incongruous with Federal requirements; that is, compliance with the non-Federal requirement causes the Federal requirement to be violated, or vice versa. The second criterion, the "obstacle" test, in a sense, subsumes the first and concerns those non-Federal rules that, regardless of conflict with a Federal requirement, stand as "an obstacle to the accomplishment and execution of the (HMTA) and the regulations issued under the (HMTA). In determining whether a non-Federal requirement presents such an obstacle, it is necessary to look at the full purposes and objectives of Congress in enacting the HMTA and the manner and extent to which those purposes and objectives have been carried out through . . . the regulatory program.\textsuperscript{41}

Faced with a deluge of proposed rule-making, DOT regulations were amended in 1981 to include an appendix intended to advise state and local governments contemplating rule-making activity as to the likelihood of preemption due to inconsistency with federal regulations. Under those guidelines, state and local regulations will be deemed inconsistent, and preempted, if they:

1) prohibit the highway transport of large quantity radioactive

\textsuperscript{38} 49 C.F.R. § 107.201.
\textsuperscript{39} 49 C.F.R. § 107.215-107.225.
\textsuperscript{40} 49 C.F.R. § 107.209(c) (2).
materials without providing for an alternative highway route for the duration of the prohibition;

2) require additional or special personnel, equipment or escort;

3) require additional or different shipping paper entries, placards or other hazard warning devices;

4) require the filing of routing plans or other documents containing information that is specific to individual shipments;

5) require pre-notification;

6) require accident or incident reporting other than as immediately necessary for emergency assistance; or

7) unnecessarily delay transportation.\textsuperscript{42}

3. \textit{Court Challenges of State and Local Legislation}

Despite the availability of DOT guidelines and inconsistency rulings, both state and local governments have enacted legislation that has been challenged in the courts on grounds that such legislation is preempted under the HMTA and violates the Commerce Clause.

Local governments have pursued a variety of goals through the enactment of local ordinances regulating the transportation of hazardous materials through their localities. Among these goals have been blatant attempts to impose flat bans on hazardous shipments on a city, township or county-wide basis. Perhaps the best documented example of such an attempt is the ten year battle waged by New York City in seeking to have upheld its local regulations banning the transport of spent nuclear fuel from Brookhaven, Long Island, through metropolitan New York City.

The Brookhaven National Laboratories, which has operated a nuclear reactor on Long Island since 1954, routinely shipped highly radioactive uranium by truck through New York City, using a densely populated route across the 59th Street Bridge, north on Third Avenue and across town to the George Washington Bridge, where it was then carried south to a reprocessing site in South Carolina. In 1976, New York City amended its local Health Code to ban such shipments through the City. Brookhaven, which was then forced to barge its uranium shipments across the Long Island Sound into Connecticut, petitioned DOT to declare the New York City regulation inconsistent with federal regulations, and thereby preempted. In light of DOT regulations designating a system of preferred routes encompassing the interstate highway system and supplemented by local highways selected and approved by state routing agencies, DOT expressed the opinion that local regulations such as New York's, which "... prohibit the transportation of large quantity radioactive materials by

\textsuperscript{42} 49 C.F.R. § 177, app. A (1982).
highway between any two points without providing an alternative route for the duration . . . are preempted." 43

Shortly thereafter, New York City filed in district court, seeking invalidation of the DOT preemption ruling. The District Court partially invalidated the DOT regulation, based on its interpretation of the HMTA as requiring that regulations promulgated under the statute set the safest feasible standard for the transportation of hazardous materials. 44 On appeal to the United States Court of Appeals for the Second Circuit, the District Court's ruling was reversed, thereby upholding the Transportation Department's power to preempt local law. 45 In reversing the findings of the District Court, the appellate court relied heavily on the legislative history of the HMTA in reiterating the need for a central and consolidated authority in controlling the transportation of hazardous materials. The court noted that:

In framing (the) HMTA, Congress decided that federal regulations would presumptively preempt inconsistent local regulations and that local authorities would then have the burden of demonstrating to DOT that their local regulations provided greater safety without burdening interstate commerce. Courts are not free to reverse this presumption or to shift the burden of proof from states to federal authorities. 46

Unassuaged, New York City followed the advice of the court in formally petitioning DOT for a waiver of preemption, based on its claim that the city's dense population makes it unsafe to transport radioactive materials on roadways located in the Bronx and in Queens. On September 9, 1985, DOT denied the City's petition, based upon the city's failure to show exceptional circumstances that would justify a waiver from preemption. 47 The decision marked the first time that DOT has ruled on a request from a local government that it be allowed to override federal regulations. 48

Despite New York City's stated intention to appeal the DOT decision, 49 they will have an uphill battle in light of the fact that courts have held that flat ban ordinances unconstitutionally discriminate against interstate commerce. 50

Although flat ban ordinances have been stricken as inconsistent with federal regulations and violative of the Commerce Clause, at least one

43. id.
45. id. 715 F.2d 732 (2d Cir. 1983).
46. id. at 752.
48. id.
49. On September 9, 1985, when the DOT decision was announced, Mayor Koch told reporters, "We will press this matter until the last court has an opportunity to render justice." id.
court has upheld a local ordinance which severely restricts shipment of hazardous materials through densely populated cities. In National Tank Truck Carriers v. New York City,51 the court upheld New York City Fire Department regulations which ban the shipment of hazardous gases by tank truck through New York City unless no practical alternate roadway exists, and which further limit use of city streets by establishing curfews for tank truck travel.

The court in National Tank Truck Carriers relied heavily on the factual record, which indicated that a provision for practical alternatives existed, and that trucks were able to use a New Jersey-Westchester-Long Island route, which took only one hour longer to drive than the prohibited New Jersey-New York City-Long Island route.52 It is important to note that the alternative roadway provision distinguishes the instant Fire Department regulations from those deemed inconsistent in New York City v. DOT,53 in which no practical alternative existed within the State other than barging the shipments across Long Island Sound.

Although the appellant in National Tank Truck Carriers argued that curfews established under the regulations which prohibited all travel on City roadways during rush hours were inconsistent with DOT regulations forbidding unnecessary delay in transport,54 the court viewed the curfew delays (which forced the drivers to wait for curfew to lift en route) as necessary when viewed in light of the intended purpose of the federal regulations, namely, to protect against risks to life and property from the transportation of hazardous materials.55

Applying the two-pronged test to determine consistency with federal guidelines,56 the court held that truckers could dually comply with local and federal regulations, and that the local regulations did not stand as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.57

In discussing the burden placed upon interstate commerce by the local regulations, the court held that the local regulations might, in fact, burden interstate commerce through increased shippers’ costs by making trucks travel more miles to circumvent the city or by delaying trips by the established curfews. However, such inconveniences were found not

51. National Tank Truck Carriers v. New York City, 677 F.2d 270, (2d Cir. 1982).
52. Id. at 274.
54. 49 C.F.R. § 177.853 (a) provides:

   "No unnecessary delay in movement of shipments. All shipments of hazardous materials shall be transported without unnecessary delay, from and including the time of commencement of the loading of the cargo until its final discharge at destination."

55. National Tank Truck Carriers v. New York City, 677 F.2d 270, 275 (2d Cir. 1982).
56. 49 C.F.R. § 107.209(c) (1) & (2).
57. National Tank Truck Carriers v. New York City, 677 F.2d 270, 275 (2d Cir. 1982).
unconstitutionally disproportionate when balanced against the public interest in avoiding catastrophic incidents in densely populated urban areas.\footnote{159}

It should be noted that the court’s decision in \textit{National Tank Truck Carriers v. New York City} is inapposite to the decision in \textit{National Tank Truck Carriers v. Burke},\footnote{59} in which state regulations containing curfew provisions identical to those established by the New York City Fire Department were stricken as inconsistent with federal regulations. Further, the decision, in \textit{National Tank Truck Carriers v. New York City} conflicts with DOT’s current policy of preemptsing regulations that force drivers to take alternate routes, which “export the problem” to other jurisdictions.\footnote{60}

State regulations requiring hazardous materials transporters to obtain licenses and pay annual licensing fees have been upheld in the courts. Relying on a prior DOT ruling,\footnote{61} the court in \textit{New Hampshire Motor Transport Association v. Flynn},\footnote{62} upheld New Hampshire licensing regulations on the ground that such fees were not preempted as inconsistent with the HMTA nor violative of the Commerce Clause.\footnote{63} In characterizing delays that might occur in the obtaining of licenses as insignificant, the court noted that under the regulations, truckers could obtain single-trip licenses during ordinary business hours, and those making nighttime or weekend trips could apply in advance for an annual state license.\footnote{64} Additionally, the court discussed in some detail the state’s proposed use of revenues obtained from licensing fees, as follows:

The fees are expected to generate annual revenues of between \$700,000 and \$800,000. At the same time, the state must spend money to enforce the hazardous materials regulations. It must, for example, tell truckers what the rules are (it originally sent out notices to approximately 15,000 affected parties); it must inspect and license trucks; and it must train employees to carry out enforcement work. When a truck has an accident involving significant damage, the state sends employees to the scene to make out accident reports, to re-route or direct traffic away from the location of the accident, to inform the necessary state agencies which must then help to control the damage and clean up the spill, and to make certain that both people and surroundings will be properly protected. Such work is directly attributable to the transportation of hazardous substances within the state.\footnote{65}

Somewhat inexplicably, a local regulation imposing similar licensing fees on hazardous materials transporters has been stricken as violative of

\footnote{58} Id. at 274.\footnote{59} National Tank Truck Carriers v. Burke, 535 F. Supp. 509 (D.R.I. 1982).\footnote{60} 44 Fed. Reg. 75,566 (1979).\footnote{61} Id. at 75,570.\footnote{62} New Hampshire Motor Transport Assoc. v. Flynn, 751 F.2d 43 (1st Cir. 1984).\footnote{63} Id. at 46.\footnote{64} Id. at 51.\footnote{65} Id. at 47.
the Commerce Clause. In *Browning-Ferris, Inc. v. Anne Arundel County*, the court characterized local regulations requiring the payment of annual licensing fees by those who transported hazardous materials through Anne Arundel County as an impermissible burden upon interstate commerce. In supporting its conclusion, the court held that:

[I]f Anne Arundel County may enact such requirements consistent with the Commerce Clause, so may other counties in Maryland, and other counties in every other state as well. If each county has that power to regulate, it follows that each would have the authority to enact regulations unique unto itself. Every county, then, could have regulations in this area different from those other counties enacted regulations in this area, a person transporting hazardous waste from New York through Maryland to Virginia would be burdened not simply with the requirements of Anne Arundel County, and those of several other counties in Maryland, but of every other local government in every state on his route . . . [T]he resulting cumulative burden on interstate commerce might well be insurmountable.

Reviewing a number of other provisions contained in the local regulations, such as labelling and vehicle certification, the court noted that, "... [b]etween the State and federal laws and regulations, all transportation of hazardous substances through the county is already subject to the types of controls and requirements which the county seeks to impose . . . [to deal] with transportation." In so noting, the court has approached a subject as yet infrequently discussed: the consideration of local regulations that may be consistent with federal regulations but nevertheless impose duplicative requirements on hazardous materials transporters.

Certain states have required extensive prenotification when hazardous materials are to be transported over the state's roadways as well as the necessity of written documentation of emergency plans in order to receive a permit prior to transport. DOT, through the issuance of its inconsistency rulings, has warned that it views such regulations as imposing unrealistic compliance burdens on carriers and will strike such regulations on preemption grounds.

An example of such an attempt at regulation occurred in Rhode Island, whose regulations required that a permit be obtained prior to transport of shipments of liquified gases upon any highway, street or roadway within the state. Its regulations stated that a permit must be sought not less than four hours nor more than two weeks prior to transport and, in effect, required separate application and receipt of permit for each such shipment within the state. Specific information unique to each shipment was required, including the proposed route to be followed as well as the quantity of hazardous materials sought to be transported. Upon chal-

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67. *Id.* at 274, 275.
68. *Id.* at 276.
lengen of the regulations by an association of cargo carriers, the court held that such regulations would inevitably and substantially delay all interstate transport of hazardous materials and deemed such regulations inconsistent with DOT regulations, which prohibit all unnecessary delays in the transportation of hazardous materials.\textsuperscript{69} In so holding the court also noted that at least some of the information sought under the state regulations was identical to information that had already been furnished in accord with DOT regulations, and suggested that redundant and duplicative state legislation presented severe obstacles to the accomplishment and execution of the full purposes of the HMTA.\textsuperscript{70}

\textbf{C. DOT INCONSISTENCY RULINGS}

In reviewing recent court decisions, it is apparent that courts are increasingly following DOT’s lead in the determination of consistency with federal guidelines.

DOT inconsistency rulings have been issued preemptsing as inconsistent state or local regulations which require additional testing or certification of containers used in transporting hazardous materials. For example, Vermont and Michigan regulations required storage containers to be tested for conformity with standards established for unique transportation situations, especially movement over the states’ major bridges.\textsuperscript{71}

DOT inconsistency rulings have likewise invalidated state regulations which purport to classify certain transported materials as hazardous when such classifications are inconsistent with those established under the HMTA or DOT regulations.\textsuperscript{72}

At issue were Vermont regulations which included the acronym “RADWAS”, defined as irradiated reactor fuel and radioactive waste that are large quantity radioactive materials. In ruling that Vermont’s regulations were preempted under the HMTA, DOT noted that the term “RADWAS” was not synonymous with the “highway route controlled quantity radioactive materials” as established by DOT regulations. Discussing the effect of such regulations, DOT expressed the view that:

By imposing additional regulations on a subgroup of highway route controlled quantity radioactive material to be known as “RADWAS”, Vermont has created a new hazard class. If every state were to assign additional regulations on the basis of independently created and variously named subgroups of radioactive materials, the resulting confusing [sic] of regulatory requirements would lead ineluctably to the increased likelihood of reduced compliance with hazardous materials regulations and subsequent decrease

\textsuperscript{69} National Tank Truck Carriers v. Burke, 535 F. Supp. 509, 517 (D.R.I. 1982).
\textsuperscript{70} Id. at 518.
in public safety.\textsuperscript{73}

In this respect, courts have uniformly followed DOT's lead by requiring that hazard class definitions contained in state or local regulations be entirely consistent with those established by DOT, and have on occasion remanded cases where alleged conflicts existed in local hazard class regulations to await pending DOT inconsistency rulings.\textsuperscript{74}

III. CONCLUSION

In conclusion, it is clear that a number of beneficial goals can be accomplished through legislation regulating the roadway transport of hazardous materials. These include:

1) improving the safety of such shipments and, conversely, decreasing the likelihood of catastrophic accident;

2) establishing emergency response guidelines that would save lives and assist emergency response personnel in coping with accidents that do occur; and

3) providing uniformity and consistency in regulation so as to permit the flow of materials in interstate commerce and to simplify compliance by the nation's trucking and chemical industries.

It is likewise clear that federal legislation and regulation embodied in the Hazardous Materials Transportation Act and Department of Transportation regulations achieve such goals. In large part, however, the proliferation of additional legislation at the state and local levels has frustrated such goals by engrafting duplicative or inconsistent requirements on an already heavily regulated area. The Department of Transportation and a number of courts have realized that however laudable the purposes of such legislation, the result is deleterious, in placing an insurmountable burden on companies that must ship hazardous materials across a number of states and localities in interstate commerce.

The Department of Transportation has properly defined narrow areas in which state and local governments may regulate. As such, local governments should consult with state routing agencies in establishing routes of preferred travel in light of particular local hazards within their jurisdictions. It may be argued that licensing on the state and local levels provides much needed revenues for dealing with accidents that occur within their jurisdictions. However, if varying licensing requirements were enacted within every locality and state in the nation, the flow of interstate commerce would be severely hampered. As more practical alternatives, a federal fund might be established that would be available to both states and localities or, uniform state licensing requirements might be estab-

\textsuperscript{73} Id. at 46,660.

\textsuperscript{74} National Tank Truck Carriers v. New York City, 677 F.2d 270 (2d Cir. 1982).
lished. Similarly, densely populated cities which seek to decrease the risk of accident by banning the transport of hazardous materials altogether merely export inherent and unavoidable risks to other jurisdictions unfairly. Instead, cities must work with state and federal agencies in designating preferred routes that minimize the risks while permitting continued interstate transportation of hazardous materials.

In seeking to protect the Nation and its people against the risks involved in the roadway transport of hazardous materials, Congress has enacted comprehensive and effective federal legislation. By ensuring that such legislation plays a dominant and unifying role, the continued free flow of necessary materials in interstate commerce will be assured.
Book Review


by ROBERT M. HARDAWAY*

The better part of Bailey et al.’s recent study of airline regulation is dedicated to documenting the history of airline regulation,1 the transition to deregulation,2 and the economic consequences of deregulation.3 It may well be remembered as a final shot in the “Great Deregulation Debate” which, unfortunately for this very competent work, coincidentally ended in the airline industry about the time of this book’s publication.

The problem, of course, is that economic deregulation of the airlines is now, very simply, not the issue. While it is true that one sometimes still hears of reports of speeches about the great disaster of airline deregulation4 (particularly from representatives of airline unions),5 the fact remains

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2. BAILEY, supra note 1, at 27-37. For other reviews of the transition to deregulation, see Levine, Revisionism Revised: Airline Deregulation and the Public Interest, 44 LAW & CONTEMP. PROBS. 179 (Winter 1981); Hendricks, Regulation, Deregulation, and Collective Bargaining in Airlines, 34 INDUS. & LAB. REL. REV. 67 (1980); Bailey & Panzar, The Contestability of Airline Markets During the Transition to Deregulation, 44 LAW & CONTEMP. PROBS. 125 (Winter 1981); Keeler, Airline Regulation and Market Performance, 3 BELL J. ECON. & MGMT. SCI. 399, at 421 (1972).


that the deregulation genie has escaped from its bottle, and is not likely to
be returned to its former comfortable abode. As the book itself points out,
early industry opposition to deregulation disintegrated in the mid 1970's.6
United Airlines' defection from the ranks of the opposition in 1977 turned
the tide,7 and the industry trade association (ATA) in that year did not
testify against airline deregulation as it had done but two years earlier.8
In 1978, President Carter, who had trouble getting Thanksgiving Day Ad-
dresses approved by a cantankerous Congress, enjoyed the supreme
luxury of signing the Airline Deregulation Act which he had supported,
and which had been passed in the House by the unheard of vote of 363 to
8, and in the Senate by a vote of 83 to 9.9 By the time of Bailey et al's
published study, the only remaining vocal dissent to deregulation was
coming from the unions,10 and even they were learning to at least adjust
to the dawning of the new age, and in some cases even prosper.11

With the exception of the airline unions, Bailey is thus preaching to
two groups: 1) the already converted, and 2) those who see airline de-
gerulation as a fait accompli, and therefore take the view that efforts
would be better expended on learning how to adjust to deregulation than
on patting ourselves on the back by proving how wise we were in deregu-
lating the airlines ten years ago.

A third group could perhaps be added, i.e., those who are concerned
that whatever benefits have been gained from deregulation are now
threatened by three ominous trends: 1) mergers by existing carriers into
mega-carriers12 (mergers which are now almost being routinely rubber-
stoned by a complacent Department of Transportation over frequent ob-

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6. Bailey, supra note 1, at 33. For an excellent history of this period, see Dempsey, supra
   note 1.
7. Bailey, supra note 1, at 33.
8. The author was advised in a telephone interview with William E. Jackson, Vice-President
   for Public Information of the Air Transport Association, on Jan. 20, 1984, that only Republic
   Airlines would favor re-regulation, and that even Republic did not express this view at the last
   ATA directors meeting.
9. See supra note 1, at 34.
10. See supra note 5.
11. It is true, of course, that airline unions can no longer maintain the high wage differential
    they commanded during regulation, by which typists were paid 41% more than their deregulated
    counterparts, computer operators 38%, and even janitors received 82% more than their hapless
    counterparts unable to enter the elite ranks of airline employees. Office of Economic Analysis,
    Civil Aeronautics Board, Competition and the Airlines: An Evaluation of Deregulation (1982) at
    114. (Bailey cites U.S. Bureau of Labor Statistics 1980 published data to show that in 1980
    keypunch operators at airlines earned "31 percent more than the average wage for all keypunch
    operators"). However, the economic challenge of new entrants has made several of the airlines
    more vulnerable to union demands for a voice in management, and even part ownership of the
    airline itself, as revealed by the stock ownership plans incorporated into recent agreements.
jection of an apparently impotent Department of Justice);\textsuperscript{13} 2) restrictions on access to major airports which are creating increasingly anti-competitive effects on airline entry; and 3) bias in computer reservation systems which are controlled by a few major carriers.\textsuperscript{14} Unfortunately, Bailey et al dedicate only 7 pages to mergers,\textsuperscript{15} and 7 pages to the problem of airport access, including computer reservation systems.\textsuperscript{16}

But back to whether deregulation was good or bad: yes, with a profusion of charts and tables from CAB and Industry reports, Bailey et al not only beat the poor horse dead, they cremate and bury its charred remains. Yes, the competitive environment of deregulation did indeed result in lower fares,\textsuperscript{17} and greater efficiency;\textsuperscript{18} the airline’s financial woes during the 1980-83 recession were indeed caused by high fuel prices and a slackening of demand,\textsuperscript{19} routing options for the consumer have expanded,\textsuperscript{20} small community service has on balance improved,\textsuperscript{21} and “the ability of airlines to enter and exit easily should prevent fares from exceeding the cost of service.”\textsuperscript{22} Of course the post-Kahn CAB has been


\textsuperscript{15} Bailey, supra note 1, at 173-179.

\textsuperscript{16} Id. at 187-193.

\textsuperscript{17} Bailey, supra note 1, at 61: “Airfares rose substantially less rapidly than costs and inflation through the second quarter of 1979. . . Average industry fares trended down were after the first quarter of 1981 but firmed as the economy recovered in 1983.” Fare increases between 1976 and June 1983 were less than both increases in the CPI and increases in airline costs.

\textsuperscript{18} Bailey, supra note 1, at 150: “Both the trunkers and the locals have made operational changes that have increased productivity since deregulation . . . load factors rose to the highest levels in the late 1970’s, following the liberalization of discount air fares.” See also, Hardaway, supra note 3, at 137-141.

\textsuperscript{19} Bailey, supra note 1, at 63: “[T]he rapid increase in fuel prices and the prolonged economic slump of 1980 through 1983 would have adversely affected industry profits regardless of the regulatory climate. . . In fact the reductions in industry fares beginning in the first quarter of 1981 stimulated traffic and may have thereby ameliorated the effect of the industry slump.” Fuel price increased by 105% between March 1979 and March 1980, alone. Meyer, supra note 3, at 103.

\textsuperscript{20} Bailey, supra note 1, at 11.

\textsuperscript{21} Id. at 123: “[S]mall cities that retained larger carrier service are receiving an increased number of departures to large and medium hubs. Communities dropped by these carriers experienced sharp increases in flights, albeit with smaller aircraft than before. Since 1981 service to small communities has improved further as the economy has recovered.”

\textsuperscript{22} Id. at 171.
saying this all along,23 as have a host of other commentators.24 But while there are still those who oppose the theory as well as practice of airline deregulation, they are not likely to be swayed by this book, which fails to meet the arguments of its likely opponents. Even those with no particular axe to grind still argue that, whatever the economic benefits of deregulation to the consumer, these benefits are outweighed by such social costs as the loss of jet service to communities where jet service is no longer economical.25 There are of course strong arguments rebutting these views, but they are not set forth in Bailey et al’s study.

At a time when the deregulation of motor carriers and railroads is far from complete, the experience of airline deregulation nevertheless provides an excellent case study and blueprint for deregulation of the other transportation modes. Bailey’s study is a viable tool in this context, not so much for its application of economic theory to the actual state of a transportation mode (Breyer,26 Friedlander,27 and MacAvoy28 have already done this along similar and traditional party lines), nor even as a deregulator’s version of the “Little Red Book”. Rather its prime use will be as a compendium of previously scattered statistics, tables, and studies supporting airline deregulation, spiced with interesting historical anecdotes, if not deep analysis. As Bailey et al tells it, for example, when opponents of airline deregulation at the Kennedy Hearings in 1975 were confronted with the fact that unregulated intrastate airlines operating in such states as California and Texas were able to provide lower fares to consumers, they responded by attributing such results to unique operating conditions such as “good California weather.”29 Zealous Kennedy staffers then investigated this claim and found that “there were 228 hours of poor visibility in Los Angeles in 1974 and 233 hours in Boston.”30 The implication, of course, is that the opponents to deregulation were buffoons reduced in desperation to explaining the substantially higher fares and lower investment returns of the regulated airlines by a 5 hour annual difference in weather conditions. Bailey’s breathless conclusion: “The nature of specific evidence in counter-acting opponents’ views was enormous. The

23. See 1984 CAB DRAFT REPORT, supra note 17.
26. BREYER, supra note 24.
29. BAILEY, supra note 1, at 31.
30. Id.
dramatic newspaper coverage of the hearings created a political base of support... The evidence showed that consumer benefits were being withheld by the regulatory process, and a different regime was needed to bring the possibility of lower fares to the U.S. public..."31 The reader almost visualizes Bailey et al doing a victory dance over the prostrate bodies of regulatory ideologues.

Although probably accurate in most respects, the ideological tone of such conclusions are hardly persuasive to the audience who might benefit most from this work. Even the vast number of facts and statistics included in the text could be more generously documented. Footnotes average less than one per full page of text, and while this gives an admirable uncluttered look (presumably for the benefit of the layman or more casual reader), it detracts considerably from the usefulness of the book to the scholar and researcher, who must make reference only to the book itself in citing a vast array of facts and statistics which are critical to its overall thesis.

The book’s cover quotes critics who describe it as “an illuminating description and evaluation of the airline deregulation process,”32 and “an excellent evaluation chronicle of perhaps the most significant regulatory reform of our time."33 This reviewer concurs, and will keep this book on his shelf as a handy, and even indispensable resource reference for research on the airline industry. This book could have been much more, however, and with further analysis of its vast data, have made a substantial contribution to the now more pressing problems of airline mergers and airport access.

31. Id.
32. Id. (Book Cover).
33. Id.

by ROBERT L. RIVERS*

This text is a new entry and contribution to the study of transportation law and economics. It traces the evolution of transportation regulation from the Granger Laws of the 1860’s to the deregulation legislation of the 70’s. The text is oriented to the graduate introductory level and can be used by advanced undergraduate transportation majors. Case references with decision dates provide a source guide for the researcher.

There are eight chapters in the text; five trace the development of economic regulation for each mode, and the last three are concerned with the increasing role of the government’s direct involvement with transportation labor and with the ownership and operation of transportation facilities—AMTRAK, CONRAIL, and public transit.

Chapter 1 presents a brief historical survey of the development of transportation agencies and the events which led to the enactment of public regulation to protect the economic welfare of carrier service areas against undue discrimination. The authors trace evolution of several transportation agencies and the reasons for the development of state and federal legislation to protect persons and places against undue discrimination and economic damage.

Chapter 2 is the “heart” of the book. It relates to the recent legislation and rules which rail carriers must observe under the Staggers Act to inaugurate new services or to effect changes in existing levels, and in abandonment procedures. Recent amendments to the Interstate Commerce Act have reduced the degree of ICC authority over carrier management decision making and have speeded up the ability of carriers to effect economic changes in operations without the time and expense of lengthy Commission hearings.

The Motor Carrier Act has eased entry requirements for new carriers to obtain certificates and thus increase competition within the industry. The agricultural exemptions are expanded to encourage greater participation in this service. In spite of deregulation, motor carriers remain the most regulated of all modes. The Airline Deregulation Act of 1978 set into

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motion the gradual elimination of all economic regulation for air transportation by 1985. Safety regulation was transferred to the DOT. The results are more competition from new entrants, lower fares, and improved service.

Chapter 3 is a clear and detailed presentation of rate principles, a survey of the legal aspects of tariff publication, and of the conditions under which the ICC will suspend and review under the new rules of the Staggers Act. Rail carriers now have greater rate making freedom and a corresponding ability to introduce pricing innovations in order to remain competitive with other modes.

The Rule of Rate Making deletes the umbrella feature designed to protect traffic of competing higher cost modes. New rules have been promulgated for household good carriers to govern customer-carrier relations (a much needed change). Tariff provisions allow for the quotation of binding cost estimates, with guaranteed pick-up and delivery dates in lieu of scale weights at time of departure.

The Air Cargo Act of 1977 initiated the deregulation process for the airline industry which was completed January 1, 1985. Carrier liability for air cargo now appears to be a matter of shipper concern; liability for passengers is narrowly limited by ticket language. The authors indicate that litigation will be necessary to clarify the situation.

Chapter 4 explores the application of the anti-trust laws with regard to carrier actions that may reduce competition. The structure and activities of rate bureaus are examined in order to indicate whether concerted carrier action would have anti-competitive results. The law does recognize, however, the benefits of collective rate making to both carriers and to the public.

Part II examines the legal aspects of mergers, consolidations, and acquisitions of control. Applicable legislation is reviewed from 1920 to the present. The chapter describes the increase in railroad merger activity as a result of long-term deterioration in traffic and earnings. Elimination of duplicating facilities strengthens the remaining lines.

The final section relates to airline merger activity. Cases now come directly under the Department of Justice, following the demise of the CAB. The Justice Department appears to have taken a lenient position with regard to mergers. Weak carriers are being absorbed by the larger.

Carrier liability for the safe carriage of goods is traced from the times of Roman law (200 B.C.) through modifications into British common law which eventually became the basis for the American body of laws. Chapter 5 explores these concepts in depth. Common carriers are liable for the full value of all goods carried, with stated exceptions. The Carmack Amendment allows for rates to be based on a declaration of value, in
cases where the goods have a wide range of values, such as, show cattle vs. ordinary livestock; the Cummins Amendments permit a claimant to recover from any participating carrier in the haul. Motor carriers of airfreight in terminal delivery are subject to the same liability rules as the air carriers. Following deregulation, customer actions against air carriers for recovery of damages must be pursued through the courts.

Chapter 6 highlights the development of the railroad situation in the northeast which was precipitated by the bankruptcy of seven major carriers in the early 70’s. Among the basic causes were (1) the rapid growth of motor truck competition fueled by the Interstate Highway program, (2) the loss of passenger traffic to autos and planes, (3) the high cost of commuter services which drained overall carrier revenues and (4) lax or indifferent railroad management.

The seriousness of the problem and its national implications, especially for the economies of the northeast required prompt and urgent action to prevent the total collapse of the freight and commuter operations. The sequence of events is clearly developed on a step by step basis. In 1976 Congress legislated CONRAIL into existence to assume operation of freight services and to rehabilitate the deteriorated properties. Responsibility for intercity passenger service was transferred to AMTRAK which had been created by the federal government to operate passenger trains on a nationwide basis. Local rail commuter services were assumed by local and regional transit authorities with federal subsidies.

CONRAIL’s financial success has made it an attractive merger partner, or a viable operation in its own right; it is one of the three financially strong roads in the east.

Railway transportation labor has enjoyed, for many years, preferential status over their counterparts in the manufacturing and service industries. Chapter 7 explains how many of these advantages were legislated into law years ago that placed railroad employees in a more preferred status as to wages and working conditions when compared with other segments of the labor force. The nationwide economic importance of airlines and railroads, and the strong bargaining powers developed by the unions along with their ability to cripple the operations of any one carrier or of the entire mode has serious implications on the mainstreems of national commerce.

The political clout of labor and its strategic importance in transportation are described with particular reference to rail and transit labor. As a result of economic, political and legislative changes, the strategic power of transportation labor has weakened somewhat. Employees of water, motor, pipeline, and freight forwarder industries remain subject to the provisions of the National Labor Relations Act. They may request the NLRB to certify their union for purposes of bargaining with employers. This
chapter provides a good basis for the researcher who may wish to pursue some aspects of transportation labor relations at greater length.

Chapter 8 describes the trends in federal aid to urban mass transit. This mode has suffered a severe loss in ridership due to declines in central city populations, the growth of the suburbs, and the increased dependence on the automobile. Since many properties were under private ownership, they either went out of business or their operations were assumed by public agencies.

The authors present the rationale for federal assistance because local and state government entities are unable to generate sufficient resources to supply and to operate a modern, efficient, acceptable level of public transportation. Beginning with the passage of the Urban Mass Transportation Act of 1964, the federal government provided for capital grants to purchase equipment and to construct facilities and, subsequently, to subsidize operations.

One result of federal largess to urban transit has been high cost and inefficient operations on some of the larger systems, as the authors relate the situation at the Chicago Regional Transit Authority where labor costs went out of control because of local political pressures. Also, a number of cities have received capital grants to inaugurate services where no surface or rapid transit existed previously. However, not all aid has been misused as occurred on the CTA. As the size of transit systems decrease, management control and efficiency seem to improve.

The text is professionally constructed. Examples and illustrations of concepts are adequate. This work is a significant and worthy contribution to the study of transportation law.
The Formation and Dissolution of the Canadian Rail Cartel

Anthony P. Ellison*

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I. INTRODUCTION

The rail industry in Canada has been dominated for over 60 years by two railways. By the start of the 1980s, the Canadian National Railways (CN) and the Canadian Pacific Rail (CP) were producing over 90 percent of rail freight traffic and employing 87 percent of the rail labor force.¹ For

¹ Figures for 1981 indicate that CN and CP accounted for the following percentages of all Canada’s railways:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenue</td>
<td>91</td>
</tr>
<tr>
<td>Freight Revenue</td>
<td>91</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>82</td>
</tr>
<tr>
<td>Rail Investments</td>
<td>90</td>
</tr>
<tr>
<td>Railway Employees</td>
<td>87</td>
</tr>
<tr>
<td>Track</td>
<td>90</td>
</tr>
</tbody>
</table>

Statistics Canada, Cat. Nos. 52-205, 52-208, 52-209, 52-212, 52-214. There are also some 20 Class II railways whose primary function is to act as short-haul, regional carriers of bulk resource commodities. Most operate within a defined region in one province, although some do cross provincial borders or the Canada-U.S. border.
40 years these railways colluded over rates. Over the last two decades they have operated within a legislative framework which, while regulating minimum and maximum rates, has, by permitting their collusion and practice of rate discrimination, and by enforcing the publication of rates and granting exception from the anti-combines legislation, facilitated and legalized effective cartel practices.

For the first 40 years the railway duopoly operated within a legal and policy framework that deemed transport, and rail in particular, as a means of furthering the national interest by neutralizing the cost of conducting business in the less advantaged regions of the country. The regulated rail cartel, with its competition in service and collusion in rate making, would appear to have been seen not only as a means of offsetting the potentially undesirable instability ensuing from unregulated competition between the two railways, but also as a means of furthering the national, economic interest by establishing rate parity among the regions and among different shippers. While legislation prohibited forms of personal rate discrimination, commodity rate discrimination still occurred. The emerging rate structure was one in which shippers were treated with degrees of equality with respect to their size and location, and offered rates on their commodities that reflected the capabilities of the commodities to bear transport charges and comparative transport demand elasticities. Such commodity rate discrimination did not go unrestricted. Statutory rates constrained rates on export grain, a substantial portion of their traffic, and on export traffic from the Maritimes. In the mid-50’s a form of rate equalization was introduced.

The increasingly effective competition from road transport forced the end of equalized discrimination. The legislative changes introduced in 1967 removed the regulatory restrictions on non-statutory rates, empowering the railways to compete against trucks and water transport and to engage in commodity rate and locality discrimination. With the major exception of the statutory Crow Rates, which the railways were expected to cross-subsidize from profitable freight traffic, the railways were compensated for government-imposed obligations. In negotiations over compensation, the government faced a rail duopoly sufficiently unified and strong to have resisted any intention the government may have had to use information it could have derived from CN in negotiating compensating subsidies with the privately owned CP. Except for employment decisions, in which the government intervened and caused CN to retain more labor in economically deprived regions than desired, the government owned carrier was able to obtain parity of treatment from the government and the regulatory agency.

The unified positions, forcefully but discretely presented, were instrumental in the cartel forging institutional and regulatory structures that were
very much to its advantage. The railways were able to obtain subsidies to cover a larger share of their rail passenger rates. With the formation of the government owned passenger carrier, VIA Rail, the railways, who were already able to avoid competing with one another, effectively passed along (by means of operating and maintaining passenger trains on track they owned) the high wages and costs associated with the restrictive work rules that had emerged under the rail duopoly. In contrast, the railways’ bargaining over imposed obligations in the freight sector were initially less successful. The retention of extensive branch line mileage favored the shipper. Rates for export grain fell below cost, causing the railways to increase cross-subsidization and disinvestment. The railways were to retain the advantage, however, with the passing of the Western Grain Transportation Act in 1983. The Act phases out the Crow rates and the so-called “crow-benefit.”

The cartel, however, engaged in practices that were not perceived by all in the transport sector to be advantageous. Some regions, such as the Prairies, contained shippers who perceived the emerging discriminatory rate structures to be sufficiently inimical to their region’s development to support the dissolution of the cartel when it was threatened by the advent of the deregulated American railroad industry, following the passage of the Staggers Rail Act in 1980. Marking the end of the Canadian rail cartel and of the particular role of rail transport in the furtherance of the national interest, was the 1985 White Paper, Freedom to Move. The proposals to remove the exchange of cost information and the setting of common rates but permitting private contracts and rebates, expressed in Bill C-126, in effect remove the cartel’s legislative protection.

The causal link between Staggers and Freedom to Move is the substantial U.S.-Canadian traffic carried on Canadian railways. In 1983 one-quarter of Canadian railway revenue was derived from transborder traffic. Until 1980 international rail movements between Canada and the United States moved under the same restrictive rules. Both regulatory systems discouraged price discrimination between different rail routes. Enjoying immunity from antitrust and anti-combines legislation, rates were set collectively. International joint rates could only be changed upon the unanimous consent of all carriers participating in the rate and with 30-

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6. CTC, MINISTER OF SUPPLY AND SERVICES CANADA, INQUIRY INTO EFFECTS IN CANADA OF U.S. RAIL DEREGULATION, FINAL REPORT 1, Cat. TT32-6/3-1985 (June 1985).
days notice to the public. The result was an equalization of the rate levels over vast numbers of routes.

The statutory allowed scope for collective rate making, however, diminished under Staggers. The advent of intracarrier rail competition in the United States threatened collective rate making in the Canadian portion of the international rates, and also placed pressure on collective rate agreements on domestic routes. The threat came from the lower rates offered by the American railroads to shippers of international freight, and the ability, denied to Canadian carriers, to strike confidential contracts with the shipper. Attractive international rates invited requests from Canadian shippers for lower domestic rates. In the meantime, Canadian shippers took the opportunity to use American carriers and American rail routes. By 1984, CN and CP estimated that in the four years since the passage of Staggers they had lost revenue of the order of $100 million.7

The competitive pressures emerging from the deregulated American railroad industry are reflected in Freedom to Move and Bill C-126. The legislation not only proposes to withdraw regulatory support to the cartel but would also institute rate regulation by establishing rates for captive shippers and stimulate intra-rail competition by imposing joint-track usage and shared running rights. The imposition of rate regulation in captive markets is indicative of the limited rate and service competition expected to emerge from just two track-owning, vertically integrated carriers who have divided markets and operated a tight cartel for over half a century. This paper argues that effective carriage competition will occur only after a substantial restructuring of at least one of the carriers. Such proposals are outlined in Section VII, which is preceded in Section II by a brief account of the forces shaping the events determining the rail cartel. Section III examines the cartel's role in shaping the institutions and regulations that emerged from the bargaining of the railways and the government over imposed public obligations. The next section, IV, explores aspects of the performance of the cartel over the period from 1967 until the impact of the deregulated American railroad industry was felt in 1981. Section V examines the impact of Staggers on the Canadian rail industry and of the reaction of the regulatory agency, the Canadian Transport Commission. The proposed legislative changes contained in Freedom to Move and Bill C-126 are compared and examined in Section VI.

II. RAIL CARTELIZATION

The purpose of a cartel is to maximize the total profits of its members. The cartel price would be higher and the supply lower than would

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be the case without collusion, resulting in welfare\textsuperscript{8} and resource losses as excess capacity is created. The successful cartel would be identified by its increase in total profits, rise in rates and allocation of market shares in accord with agreed market portions. Such success would depend on the acceptance of each railway to charge the agreed cartel prices, which in turn would depend on the enforcement of the collusive contracts. Enforcement would be tested if it were possible for an individual railway to make more profits by being disloyal than by being loyal. Such disloyalty would depend on the level of the cartel prices, the length of time it would take to detect cheating and the elasticity of demand over the range of prices within which the cheating takes place.\textsuperscript{9} If the cartel price is high, the detection period long and the demand price elastic, the binding force of private contracts may be insufficient to maintain the cartel, instead requiring enforcement by government regulation.

In Canada, regulation of the railways has both constrained and enhanced the formation and operation of the cartel. Early regulation of the industry appeared in large part to be motivated by shippers responding to imperfectly competitive markets for railway services, rather than as conscious, planned devices that perfected the enforcement of collusive agreements. There were regulations that by enhancing rate transparency, reduced the chances of undetected cheating; such regulations stipulated that rates were to be filed and published. Departures from the filed rates were forbidden, as were rebates and confidential contracts. Regulation imposing interswitching limits attenuated shipper choices and aided the railways in allocating markets. In contrast, there were regulations that constrained the cartel and in effect introduced a form of "equalized discrimination."\textsuperscript{10} Statutory rates constrained the railway’s pricing on a substantial proportion of their traffic. Rate equalization was to be substituted for rate “discrimination.” Pooling of output and revenue by the railways was prohibited.

As Table I indicates, the support to and constraints on the enforcement of the railway cartel were to change over seven decades of this

\textsuperscript{8} The gain to the cartel is a loss to the purchasers of the cartel members’ output. Unless there are compensating price decreases elsewhere in the economy, the difference between the cartel rate and the competitive rate indicates a measure of the shippers’ loss in real income.


\textsuperscript{10} “Equalized discrimination” can be defined as that which equalizes the advantages and disadvantages of different purchasers of transport services. Boyer has described and distinguished it from cross-subsidiation, as follows: “Equalizing discrimination emphasizes the ICC is interested in equalizing the conditions of advantaged and disadvantaged shippers rather than having one party pay the bills of another.” Boyer, Equalizing Discrimination and Cartel Pricing in Transport Regulation, 89 J. POL. ECON. 270, 275 (1981).
century. For 30 years, the railway industry was effectively a duopoly subject to equalized "discrimination." From 1967 until the advent of changes introduced by the Staggers Rail Act in the United States in 1980, the rail industry could be described as a duopoly empowered with substantial collusive powers able to engage in extensive rate discrimination. The next two sections describe the formation of the duopoly and the regulation of cartel enforcement.

A. THE EMERGENCE OF A RAIL DUOPOLY

The earliest railways in England had resembled public tollroads, in which any party wishing to operate over a rail line could do so upon payment of a toll. By 1840 the advent of the steam locomotive and the iron rail had encouraged longer trains and a larger scale of operation. The result was the emergence of railway companies as exclusive providers of carriage over their own track.\textsuperscript{11} The legislation in Canada that had incorporated railway companies with such monopoly over carriage granted them freedom to determine rate levels and quality of service. Shippers relied on competition between railways to protect their interests. The competitive process, however, was irregular, with periods of stability interspersed with alternating rate wars and short-lived cartels.\textsuperscript{12} Statutorily imposed rates were the first major regulatory intervention. Their aim was to enhance the exploitation of primary products. Later regulatory intervention was principally designed to bring about greater equality of treatment of shippers and communities. This regulation indirectly strengthened, and in part limited, railway cartelization. It was three decades until the cartel’s enforcement of collective agreements was significantly strengthened by regulatory legislation.

The construction of a transcontinental railway was considered vital to the building of the federation. The government contracted with a private syndicate, Canadian Pacific Railways, to build a transcontinental railway linking the Maritimes with the newly formed province of British Columbia. The financial guarantee was facilitated by a land grant scheme which acted as collateral for the railway’s bonds. Protection for eastward moving traffic involved the granting of a monopoly to CP over southern routes, while protection for western movements was to be provided by the tariffs of the national policy.

12. In 1895 railroads operating between Chicago and the Atlantic seaboard formed the Joint Traffic Association. The Association imposed heavy penalties for infractions of the published tariffs. CP Rail joined the cartel in 1896, although the Association became defunct three years later after a ruling from the Supreme Court. As for rate wars, there was a much publicized one between the Grand Trunk and CP Rail for nine months in 1899. See A. Currie, \textit{The Grand Trunk Railway of Canada} 386, 388 (1957).
Following completion in 1885, CP lost its monopoly on southern routes just three years later. By 1903 the potential growth in the west was sufficient for the federal government to assist in the building of two new transcontinental railways.

The discriminatory exercise of the railways' monopolistic powers served to sharpen the corollaries of common carrier obligation of fair and reasonable treatment. The notion of reasonableness brought forth consideration of equal treatment. Shippers as well as regional and provincial organizations and governments called for equality of opportunity, which often translated into requests for preferential rates. Special statutory rates and rate regulation were the resulting means used to enhance regional equality of opportunity. (see Table II).

The federal government in the 1897 Crows Nest Pass Agreement and in the 1901 Manitoba Agreement exchanged rail subsidies in return for concessionary rates. These rates were in turn voluntarily extended by all rail carriers to their export grain traffic. Facing increasing pressure to deal with allegations of unjust discrimination, the government revised the Railway Act and established a rail regulatory body—the Board of Railway Commissioners. The provisions of the 1903 Railway Act reflected shippers’ responses to perceived imperfections of the rail market. The ban on pooling and the attempt to impose rate equality in effect prevented the perfection of a railway cartel, although the process requirements of rate filing and the forbidding of rebates buttressed rate stabilization.

In regulating originating and terminal switching services in 1908, the Rail Commissioners attempted to deal with the monopoly power of terminal railways. The outcome was a demarcation of carriers' markets for the rate and distance limit that were established while protecting shippers within the limit. It also served to exclude alternative carriers for shippers beyond the limit by allowing the terminal railways to charge much higher interswitching rates to shippers beyond the limit.

With a railway system such that one railway served a shipper in one part of the country and another served the receiver in another, shippers depended on co-operation between carriers to establish interline arrangements. Of particular importance at a time when there were few trucks were the agreements and rates established between carriers at the interswitching points of the railway lines. While the shipper wished to have alternative routings, the carriers, desirous of achieving maximum return on their investment, were disinclined to lose some of their captive shippers to another carrier by charging low interswitching rates.

Following complaints concerning the interswitching parties and rates charged by railways, the Railway Commissioners issued in 1908 Order Number 4988 (later known as Central Order No. 11), which established the prevailing rate and area limits and sought adoptions in those
areas where previous orders did not exist. The rate was one cent per hundred pounds and an interswitching limit of four miles from the point of interchange. In 1918, General Order 252 required a railway to move originating or terminating traffic at a prescribed rate for another carrier when the shipper or receiver was within four miles of an interchange point between the carriers. There has been no increase in the interswitching limit, and only one increase in rates: a 50 percent rise over the 1918 rates established in 1952.

The Board’s responsibilities for rate levels were severely tested with the advent of the First World War. In order to fulfill their contracts with the government, the two newly completed transcontinental railways, the National Transcontinental and Canadian Northern, required rate increases to cover the full costs of construction and to meet the rising wages demanded by the railway unions. The rate increases accommodating such costs, however, would have resulted in large profits for the CP, leaving the Board vulnerable to the charge of facilitating profiteering. Another option for differentiating rates to reflect the degree of construction subsidies was also politically unacceptable because it would have meant breaching the equity of the rail rate structure. The Board did not increase rates with the result that there was a plunge downwards in the railways’ net revenue, thereby leading to the bankruptcy of the two newly built transcontinental railways.

The Canadian Northern was acquired by the government in 1917 and was later amalgamated with the federally-owned Intercolonial and the Transcontinental. In 1919 the Canadian National Railway Company was incorporated; the Grand Trunk Pacific and the Grand Trunk joined in 1920. Unified operations began in 1923.

B. THE REGULATION OF CARTEL ENFORCEMENT

The new government-owned carrier entered into vigorous competition with CP Rail in passenger and freight markets, engaging in expensive branch line extensions. The abrupt onset of the Depression, however, brought financial losses and a Royal Commission of inquiry into railway competition.

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14. The rates are 1 1/2 cents per 100 lbs. for services involving private or industrial sidings and 3 cents per 100 lbs. for services involving team tracks. These rates are the only significant change from the 1980 order in the current General Order T-12 of the CTC, pursuant to Section 263 of the Railway Act, issued in 1965.

The 1931-1932 Royal Commission on the Railways and Transportation in Canada (the Duff Commission) after rejecting a merger of the two railways, instead offered a set of proposals aimed at enhancing cooperation rather than competition. The legislative response was the Canadian National-Canadian Pacific Act, whose central provision encouraged cooperative schemes between the two railways “for the purpose of effecting economies and providing for remunerative operation.” Such measures, despite requiring Board approval, were not to be enforced by the Board nor was the Board to require proof that all possible economies had been achieved before granting general percentage changes in rates.

The railways responded in their passenger markets by jointly operating passenger trains within central Canada. More significantly, in freight markets the carriers acted in a collective manner, exchanging cost information and establishing common rates. The carriers established in 1938 a new rate, known as “agreed rates,” designed to improve their joint competitive position with the ever threatening truckers. Upon approval by the Board, a rate would be established in exchange for the shipper agreeing to guarantee that most (if not all) of shipments would be purchased from the railway. Where the points were served by another carrier, agreement of the other rail carrier had to be obtained before the agreed charges could be implemented.

The Board, with the power under the Railway Act to “fix, determine and enforce just and reasonable rates” was faced in 1948 with the railway’s first application for a general percentage rate increase since 1920. Between 1948 and 1958 there were 12 such “horizontal” rate increase approvals. In practice, the railways were prompted to apply the rate increases selectively according to what the traffic would bear. The resulting rate increases reflected the unequally distributed intermodal competition. Rates charged for lower-valued, long-haul shipments rose relative to short-haul, higher-valued shipments. As rates in central Canada where competition from trucking was strong were not only increased to a mini-

17. Ibid at § 16(1).
18. The cooperative measures of the Canadian National—Canadian Pacific Act were inconsistent with the provisions of the Railway Act, Can. Stat. 1906, ch. 37, sec. 37, forbidding the pooling of revenue and freight. The provision of the CN-CP Act and the prohibition on pooling were in force, contemporaneously, from 1932-67.
19. The statutory provisions relative to agreed changes are found in part IV of the Transport Act. The legislation was proclaimed to come into force in November, 1938 and the sections pertaining to agreed changes were amended in 1955 following the recommendations of the Royal Commission on Agreed Changes, February 21, 1955. W. F. A. Turgeon, Comm’r, Ottawa (Queen’s Printer and Controller of Stationary, 1955).
mum, increasingly lower competitive and agreed changes were applied. In contrast, there were greater increases in rates, particularly long-haul, for the Atlantic and Western shippers.

The pressure from the provinces to constrain the emerging rate discrimination was reflected in the statute consolidations to the *Railway Act* in 1952, aimed at equalizing rates. Section 336(1), concerning a "national freight rate policy," proposed that rates on any class or kind of freight should be equalized across Canada, while Section 337, the so-called "one and one-third rule," established that the tolls applicable to freight traffic having its origin or destination in the Prairie provinces were not to exceed the transcontinental freight rate by more than one-third. In 1959 the government assumed jurisdiction over rate authorization by enacting the *Freight Rate Reduction Act*, which denied a rate increase and instead rolled back the rates. A freeze was imposed in the following year and was to remain in force until 1967.

Amendments to the *Railway Act* introduced in 1967 removed the concepts of equality of tolls and equalization introduced in the 1950's, eliminated the power of the Board to "disallow, suspend or prescribe tolls," and established a rate floor and ceiling within which the railways could establish rates. Rate transparency was retained. Rates had to be published, while Sections 380 and 381 of the *Railway Act* retained the prohibition on rebates and concessions.

The newly established regulatory authority, the Canadian Transport Commission (CTC) was to set maximum rates by means of a cost-related formula for "captive shippers." Under Section 278 of the *Railway Act* the maximum rate was set according to the long-run variable cost of the shipment plus a 150 percent contribution over variable costs for fixed costs. Under Sections 276 and 277 of the same statute rates were directed to be compensatory. Such a rate was defined as one that exceeds the variable cost of the movement of the traffic concerned.

Within these maximum and minimum rate levels, the 1967 *National Transportation Act* (NTA) provided the rail carriers with greater rate flexibility in competing with other modes. Rate regulation no longer protected the shipper from the rail carriers. Rates no longer had to be "reasonable." The railways' freedom, however, was limited by Section 23 and 27 of the NTA. Section 23 provided for appeal of freight rates that might be prejudicial to the public interest. Hence, if rates were found to be "unfair," "too high" or "discretionary" the CTC could exercise its wide remedial powers. Section 27 pertained to the acquisition of an interest in a

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transport enterprise by another transport enterprise. Such action could be deemed unduly restrictive or otherwise prejudicial to the public interest.

Most significantly, the Railway Act was amended to permit the railways to engage in collective behavior. Section 279 of the Railway Act, in permitting the railways to act in a "collective" manner, represented the residue of the legislative intent of rail cooperation contained in the Canadian National-Canadian Pacific Act of 1932-33, for it included a mandatory provision concerning the exchange of cost information and a permissive provision allowing the railways to agree upon and charge common rates:

Railway companies shall exchange such information with respect to costs as may be required under this Act and may agree upon and charge common rates under and in accordance with regulations or orders made by the Commission (emphasis added). \(^{24}\)

Now no longer required to seek formal approval from the Board (CTC) for most rate changes, uncertainty arose as to whether the rail carriers would not be regulated by the anti-combines branch of government. Under section 279 of the NTA, however, the railways were exempt, under the so-called regulated conduct exemption, as far as the exchange of information and the establishment of common rates were concerned from prosecution under section 32 of the Combines Investigation Act. Hence, this Act was explicitly recognized as not applicable to the rail industry when regulated by a government appointed Board.

III. IMPOSED PUBLIC OBLIGATIONS AND THE RAIL CARTEL

While buttressing the railway cartel, the government continued to influence resource and regional development by means of rail rates. Statutory rates were maintained and supplemented, for which the railways were either compensated directly by government subsidies or in the case of the statutory Crown Rates were expected to cross-subsidize from profitable freight traffic. Similarly, increasingly unprofitable passenger services, many of which the government wished to retain, were supported by profitable freight traffic. The NTA, however, espoused a change in the means of compensating the carriers for such imposed public obligations:

each mode of transport, so far as practicable, receives compensation for the resources, facilities and services that it is required to provide as an imposed public duty. \(^{25}\)

With the major exception of the statutory Crow Rate, the railways were to be directly compensated for government imposed obligations. The government was required to negotiate levels of service and compen-

\(^{24}\) Id. at ch. 69, § 53.

\(^{25}\) Id. at § 3(c).
sation with the railways. The government's negotiating agent was to be the newly created regulatory body, the Canadian Transport Commission, which was to determine actual losses and public need on a route specific basis. Amendments to the Railway Act established statutory provisions governing the discontinuance of passenger trains, branch line abandonments and the provisions of subsidies. Compensation for carrying export grain, known as the "At and East" rates, were made permanent by Section 272 of the Railway Act as amended by the NTA in 1967.

Sections 260 and 261 of the Railway Act primarily governed the procedures for passenger service abandonments, while Sections 252 and 253 established the process for branch line abandonments. The procedures were similar. A railway was first required to post notice of its intention to apply for abandonment. Once filed, the case became the subject of a public hearing for the purpose of establishing whether it was uneconomical, and whether it was to be in the public interest to continue and to subsidize the service.

Order No. R-31300 established the statement of costs and revenues of operating passenger services; Order No. R-6315 set up the costs and revenues of operating branch lines. Covering the three preceeding years, such estimates were submitted to the Rail Transport Committee of the CTC which investigated and reviewed the statements. If the Committee verified the loss, according to Section 254(1) of the Railway Act, it had to determine whether the branch line was to be retained or abandoned. Subsection 260(a) of the Railway Act specified some of the consideration to be included in evaluating the public interest when the Committee pursued the same decisions concerning passenger services. If the Committee was to order continuance of a passenger service the federal government was committed to bear 80 percent of the losses. Section 256 specified the payment of subsidies to reimburse the railways for the losses incurred on uneconomic branch lines. Unlike uneconomic passenger services, the government reimbursed the railways for 100 percent of the branch losses.

The CTC could not exercise exclusive control over abandonments because Section 64(1) of the NTA allowed the Governor in Council (the Cabinet) to vary, at any time, orders or decisions of the CTC.

A. **Passenger Service Contraction and Subsidization: 1967-1980**

In passenger markets, both railways had responded to the inroads made by surface and air competition by attempting to reduce their services. CP had been more successful in its contraction of passenger train miles. Between 1945 and 1958, CN reduced its passenger train miles by 6.2 percent and CP reduced it by 22 percent, while in the period 1958 to
1967, CP doubled its reduction to 45 percent with CN managing only a reduction of 5 percent.26 In the 1960’s, in contrast to CP’s contraction, CN had embarked on an aggressive marketing drive, experimenting with fare schedules and new equipment.

Although the Railway Act prior to 1967 did not specifically provide for the discontinuance of passenger train service, Sections 33, 34 and 35 of the Railway Act provided the Board with authority to handle such applications.27 Decisions were made on a route-by-route basis, based on the general principle that profitable freight services should cross-subsidize unprofitable passenger services, cross-subsidization being eschewed in the NTA, the CTC was required to determine actual losses and to determine public need. Once a carrier had posted its intention to abandon service the CTC was then to determine the extent of the loss and the subsidization of the loss deemed to be in the public interest.

The decisions of the CTC indicated an inclination, in the face of strong political pressures, to subsidize rather than abandon uneconomic services. By 1973 only 11 of the 70 decisions of the CTC had permitted abandonment, with a resulting rise in subsidies (see Table III). Combined passenger subsidies of the two carriers by 1977 were a shade under a quarter of a billion dollars, representing a ratio of 1.65 to passenger revenue for CN and 2.11 for CP (see Table III). Inclusion of the 20 percent of the subsidy borne by the railways suggests that in 1977 subsidies per passenger mile were 15.3 cents for CN and 19.4 cents for CP. Rather than spurring increases in efficiencies, the bearing of 20 percent of the cost of production appeared to have encouraged the railways to disinvest in equipment and services. Between 1967 and 1977 CN reduced its passenger train miles by 42 percent and CP by 29 percent. CN’s greater reduction accounted in large part for the Crown carrier’s lower subsidy per passenger train miles after 1975.28 CN, however, was to be less successful in reducing its services in the unprofitable Newfoundland Railway.29

27. According to a decision in 1966, the Board “decided whether loss or inconvenience to the public consequent upon discontinuance of train service are outweighed by the burden that continued operation of the service would impose upon the railway to such an extent or to justify discontinuance of the service.” J. Gibberd & P. Wesley, An Analysis of Railway Transport Committee Decisions—1967-1980 p.7 (Research Branch, Canadian Transport Commission, Report No. 1982-06E).
29. In 1979 CN attempted to lay off 300 employees of the Newfoundland Railway. However, the federal government ordered CN to delay the lay-offs. In 1981 Transport Canada delayed the closing of two CN Express terminals in the Maritime provinces. R. Weaver, The Politics of Industrial Change—Railway Policy in North America 201 (1985).
The railways, resentful of paying 20 percent of the cost of the subsidy, pressured for reductions in service and for 100 percent coverage of costs to be borne by the government. Alarmed at the rise in subsidies determined by the decisions of its regulatory agency, the government sought to contract directly with the railways for the provisions of rail passenger services. Unable to persuade the two carriers to form a passenger rail company, the government in 1977 established VIA Rail Canada.

The government was to contract with VIA for the provision of passenger services. The Crown corporation was in turn to contract with the two railway companies for the provisions of passenger services by purchasing track right-of-way and operating crews. VIA provided equipment which was purchased at book value from the railways. The CTC established the basis upon which the railways charged VIA for these services and audited the statements of the railways, thereby assuring that they were in accordance with the approved costing principles of CTC Costing Order No. R-6313. The Railways Costing Regulation, as it was so referred, was essentially the same as Order No. R-31300, which constituted the basis for the compensation to the Railways of 80 percent of their losses. The CTC retained regulatory responsibility for safety, service quality, operations and disconveniences. The Cabinet, however, could overturn all decisions except those regarding safety, while the Minister of Transport was responsible for establishing service levels and for the resulting deficits, which were paid annually by the Minister of Transport.


Over-extended by competing railways in the 1920's, many miles of branch lines were made redundant in proceeding decades as truck transport extended shippers' range of distribution and took much of rail's short-haul traffic. Most branch line mileage lay in the Prairies and, owing to the very low regulated rail rate for grain traffic, was used primarily for grain traffic. As the deviation between the cost of handling grain and the statutory rates grew even wider from the 1950's onwards, the railways responded by disinvesting in rolling stock, handling equipment and the branch lines. Despite such disinvestment, track abandonment was difficult. The grain collection system with its small grain terminals located on the branch lines, clustered around which were small communities, was

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30. On January 1, 1977, VIA took over the marketing responsibilities of rail passenger transport. On October 28, 1978, VIA took over the Western Transcontinental service, and on April 1, 1979, VIA took over all passenger trains. VIA Rail Canada Inc. ANNUAL REPORT (1982).

31. Between 1923 and 1932 the track mileage of CN and CP expanded by 11 percent, Canadian Pacific Ltd.—1923-71, Statistics Canada, Cat. No. 52-202 annual; Canadian National Railways 1923-71, Statistics Canada, Cat. No. 52-201 annual. For a discussion of the competition between the two railways which led to this rail expansion, see Supra Note 27, at 56-57.
strongly resistant to a more centralized collective system of fewer branch lines and grain terminals. Fewer than 500 of the more than 1,900 miles on the Prairie provinces were abandoned in the 20 years following the end of the Second World War. 32 Track utilization grew to be unequally distributed. The MacPherson Commission reported that although CN’s branch lines represented 40 percent of the company’s total mileage, they contributed only 4.4 percent of the total ton-mileage over the period 1956-1959. 33

Pressures from the railways to abandon unremunerative branch lines mounted in the 1960’s. A list of proposed abandonments drafted by the Board, Prairie governments, and the grain trade met with disapproval from the federal government. The federal government’s insistence in retaining control over branch line abandonments was shown prior to the passage of the NTA. In 1967 the government issued an order prohibiting the abandonment of 17,000 miles of Western lines until January 1, 1975. This left only 1,800 miles “unprotected” such that they were subject to being abandoned if the railway could prove its case before the CTC. 34

Such a freeze meant that the abandonment process was launched after January 1975. It was to meet with further constraints. The Crow rates remained, and the gap between the costs of moving grain and revenue widened, to the point that by 1980 statutory grain rates covered only 20 percent of the actual costs of carrying grain. 35 As grain traffic that did not originate on designated uneconomic lines did not receive government subsidies, the railways, unable to abandon grain traffic, continued to disinvest in their grain carrying rolling stock and branch lines. Box car fleets shrank and train speeds had to be reduced.

The deterioration in the grain transportation and handling system brought forth a series of reports on the Crow and the branch line systems. The Hall Commission was appointed in 1975 to inquire into the areas served by the 6,283 miles of protected lines. Reporting in 1977, the Commission recommended 2,165 miles should be abandoned over the five year period beginning in 1971, 1,813 miles should be kept as the Basic Network and 2,344 should be turned over to a newly formed institution, known as the Prairie Rail Action Committee (PRAC). 36 The government instructed the PRAC to decide on the disposition of the 2,344 miles. By

32. Supra Note 27, Table 3.2 at 63.
33. Supra Note 21, Vol. II at 128. The Commission’s examination of CP’s data in 1948 and 1954 “showed no evidence of a pattern different from that found on CN.”
34. J.C. Gilson, MINISTER OF SUPPLY AND SERVICES CANADA, WESTERN GRAIN TRANSPORTATION—REPORT ON CONSULTATIONS AND RECOMMENDATIONS 7-8 (1982).
35. Id. at 1.
Order in Council, the government insured protection of the basic network to the year 2,000. The PRAC recommended 958 miles to be added to the basic network.\textsuperscript{37} The Neil Report, commissioned by the 1979 federal Conservative government, recommended that 592 miles should be added to the Basic Network and 1,011 miles (375 miles to be served by off-track elevators) turned over to the CTC for hearings.\textsuperscript{38} The incoming Liberal government accepted these recommendations in 1980.

The abandonment process included an investigation and review of the statements of costs and revenues according to Order No. R-6313 by the Railway Committee of the CTC. If the Committee verified the losses, according to Section 254(1) of the Railway Act, it had to determine whether the branch line was uneconomic and if it was, it had to decide if the line was to be retained or abandoned.

There were delays in processing abandonment applications. The costing order took time to assemble, while the Railway Committee was fully occupied in assessing the extensive subsidies it was to give for passenger services. The first subsidy payments were made in 1970. Over the decade 1970-1980 the two railways received over $1 billion of which CN received almost $550 million (see Table IV). CN also achieved more branch abandonments. Over the five year period following the removal of the freeze in 1975, CN’s length of track in the three Prairie provinces shrank by 11 percent while CP’s shrank by 6.9 percent.\textsuperscript{39} Non-compensatory rates for transportation of grain, however, caused the railways to continue their disinvestment in branch lines and grain rolling stock.

The government’s immediate response to the deteriorating track and rolling stock was the introduction of a rehabilitation program and the purchasing of hopper cars for the railways. In 1977 the federal government agreed that 1,300 miles of CP and 1,015 miles of CN lines would be rehabilitated, with a projected expenditure from 1977 to 1984 of $298.1 million for CN and $196.8 million for CP.\textsuperscript{40} In 1972 a federal program to

\textsuperscript{37} D. Neil, Minister of Supply and Services Canada, Recommendations to the Minister of Transport on Prairie Branch Lines,Cat. T22-48/1979 (1979).

\textsuperscript{38} Id. at xviii.

\textsuperscript{39} Railway Transport, Part III, Equipment, Track and Fuel Statistics, Statistics Canada, Cat. No. 52-209 annual (First Main Track Mileage, by Province, at December 31, 1975 & 1980). CN’s total net route mileage shrank by 6.7 percent and CP’s by 5.10 percent over the period 1975-80. According to CTC’s estimates, the following decisions were made concerning decisions to abandon Prairie branch lines:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of decisions to abandon</th>
<th>Miles approved for abandonment</th>
<th>Miles not approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975-80</td>
<td>76</td>
<td>1,840</td>
<td>176</td>
</tr>
</tbody>
</table>

\textsuperscript{40} Supra Note 27, at 73.
purchase new grain hopper cars was initiated, such that by 1981 a total of 10,000 cars had been purchased or leased to the railways. In 1974 the federal government and the railways launched another program to share the costs of repairing over 7,400 box cars, while in 1979 the Canadian Wheat Board purchased 2,000 hopper cars at the producers’ expense. The provinces of Alberta and Saskatchewan each purchased 1,000 hopper cars with Manitoba acquiring 400 cars on short-term lease.\footnote{Id.}

The 1983 Western Grain Transportation Act introduced a phase-out of the Crow Rates. The Act proposed to pay the so called “crow benefit” to the railways and not to the shippers. Defined as the difference between the estimated total railway cost of transporting grain in Western Canada and the revenue derived from the statutory rate paid by producers, the railways received over $600 million in the first year. The actual freight rates will rise over time, leading to a subsequent fall in the subsidy. The federal government, however, agreed to continue direct subsidies, to keep purchasing hopper cars and to contribute to railway upgrading, thereby involving expenditures of $250 million over five years.

C. COMPENSATION FOR OBLIGATIONS

The substitution of direct compensation for that of rail internal cross-subsidization as a means of paying for imposed public obligations led to institutional structures that were largely in the interest of the railway cartel. These interests were especially well served by the establishment of VIA Rail and the passage of the 1983 Western Grain Transportation Act.

Despite the mix of private and government owned carriers, the rail cartel was well served because it acted in unison. In negotiating over compensation the government and the regulatory agency were faced with a unified rail duopoly, one which was strongly resistant to competing in the provision of track and carriage. The strength of the joint railway cooperation would appear to have been sufficiently strong to have repelled any intention the government may have had to use the information it could have derived from CN in its effort to negotiate compensating subsidies with the privately owned CP. Except in certain decisions concerning employment, CN was in turn able to obtain equal regulatory treatment from the CTC and the government.

Despite the inherent problems in allocating joint and common costs, the rising costs registered by the railways for their rail passenger services would suggest that they were successful in obtaining subsidies to cover a large share of their rail passenger costs. Certainly, the rise in subsidies\footnote{Calculations of the extent of railway losses before 1970 are difficult to evaluate owing to differences in accounting methods employed by the two railways. Estimates, gleaned from vari-}
obtained by the railways and the declines in quality of service were sufficient to have caused the government to form VIA and to remove the responsibility for passenger services from the railways.

The railways, however, retained responsibility for the operation and maintenance of the trains on the track that they owned, operated and maintained. The railways did not compete in providing these services nor was VIA directed nor powerful enough to stimulate competition by a contracting process. VIA was not permitted to audit the railway’s charges nor, when faced with the duopoly, was it able to terminate contracts.

Using the same costing regulation that had operated under the NTA’s passenger rail subsidy program, the railways were able to receive full (not 80 percent) compensation for their long-run variable costs. Facing audits by the Railway Committee that merely ensured they complied with the Commission’s costing regulations, the railways were able to pass along to VIA, and ultimately to the taxpayers, the high wages and costs associated with restrictive work rules that had been sustained under the rail duopoly. In 1980, VIA’s payments to the two railways (plus the remaining passenger subsidies) totalled $323.7 million, representing 7.34 per cent of the railways’ operating revenue. In 1977 passenger subsidies were 6.33 percent of operating revenues. Payments to the railways in 1980 accounted for 70 percent of VIA’s operating costs with equipment maintenance constituting the largest cost item and accounting for 36 per cent of the total, while train crew wages accounted for 20 percent.

These cost levels were considerably in excess of those incurred by the government owned but more powerful American passenger railway and contractor, Amtrak. By 1985-1986, rising administrative and railway contract costs had involved VIA in shortfalls that required $600 million in government subsidies. The proposed 1986 National Rail Passenger Transportation Act intends to provide VIA with a clear legislative mandate that it had been lacking. Along with specific financial

ous sources, suggested the deficit per passenger mile for CN in 1965 was 2.9 cents and for CP it was 2.8 cents. E. Johnson, A. Ray, P. Bunting and K. Mozersky, PRICING AND SUBSIDY OF AIR AND RAIL PASSENGER TRANSPORT 74 (Research Branch, Canadian Transport Commission, Report No. 246 (1976)).


44. CN and CP' operating revenues were $4,405.9 million in 1980, and $3,179.3 million in 1977, Railway Transport—Part II—Financial Statistics, Statistics Canada, Cat. No. 52-208 annual.

45. CUBUKGIL & SOBERMAN, The Cost of Rail Passenger Services in Canada: An Examination of Institutional Problems 26 (prepared for the Transportation Development Centre—TP5823E (September 1984)).

46. Id. at 57-58.

targets, the Bill proposes to provide VIA greater powers in negotiating contracts with the railways. Compensation is to be modeled on the arrangements used by Amtrak, whereby direct costs incurred by the railways will be covered, plus a performance-based incentive payment that will provide a contribution towards joint and common costs.\textsuperscript{48} For the purposes of negotiating contracts with the railway, VIA will be permitted access to railway costing information it is presently denied.\textsuperscript{49} As a result, although VIA will be able to exert greater pressure on the railways to produce desired quality of service, it will still face two suppliers not only unwilling to engage in competitive contracting, but also able to deny entry of potential competing carriers by refusing to contract for the use of their tracks.

In the case of imposed obligations in the freight sector, the government, in retaining extensive branch line mileage and removing them from the regulatory process of the CTC, favored the shippers rather than the railways. Similarly, retention of the Crow rates to below compensatory levels until the passage of the \textit{Western Grain Transportation Act} in 1983 favored the shippers. The response by the railways to "frozen" branch lines and non-compensatory rates was characterized, however, by identical policies of minimum maintenance of track and disinvestment in rolling stock.\textsuperscript{50} Both railways in turn benefited by direct government expenditure on rolling stock. Similarly, consistency in approach to the compensatory grain rate issue resulted in the railways, rather than the shippers, receiving the direct compensatory benefits.\textsuperscript{51}

\textsuperscript{48} \textit{Id.} at § 24.
\textsuperscript{49} \textit{Id.} at § 38.
\textsuperscript{50} \textit{Supra} Note 36, at 58-59.
\textsuperscript{51} There were shippers and processors who also favored the Crow benefit accruing to the railways rather than the shippers. The Gilson report had recommended the Crow subsidy be given to the Railways in 1982-83. It would then be partitioned between them and the shippers until 1989-90, when the split would be 19 and 81 percent respectively.

The government issued its response to the report in February 1983. Gilson’s proposal of a phased increase was accepted, but only until 1985-86. After this point a 50-50 sharing between shippers and railways would be achieved. Many Western grain shippers, however, were unwilling to take a subsidy and leave themselves open to corresponding rate increases. Eastern grain lot feeders in turn did not wish to see a consequent fall in feed grain prices in the West. As a result, the \textit{Western Grain Transportation Act} contained provisions such that beginning in 1983-84, the entire Crow benefit was paid to the railways, rather than the 30-30 split proposed by the Minister of Transport in February 1983. Such payments to the railways had the further apparent advantage to the government that it would give it leverage over the rail companies with respect to the enforcement of infrastructure expenditures. \textit{NORRIE, Not Much to Crow about: A Primer on the Statutory Grain Freight Rate Issue}, CANADIAN PUBLIC POLICY 434-45 (Dec. 1983).
IV. THE PERFORMANCE OF THE CARTEL FROM 1967 TO 1981

A. Rates of Return

The rail duopoly clearly possessed monopolistic power. Capital requirements limited entry. Ease of exit was limited by the governments' susceptibilities to the pressure from communities faced with line abandonments and service cessations. Legislation introduced in 1967 served to make explicit collusive rate discrimination, while regulating minimum and maximum rates. Unlike industries not inherently monopolistic, such as trucking, government regulation acted to enforce and enhance rather than create the possibilities of transforming wealth from the shipper/consumer to the rail carriers and from the carriers to those suppliers of inputs, such as labor unions, possessing monopolistic power.

An examination of the indicators of performance suggest that along with the rail cartel, changes in technology and economic structure, government policies of investment and regional development, and the imposition of public obligations have all had substantial impacts. As a result, the performance of the cartel in responding to these exogenous changes has become of greater interest.

Evidence would suggest that with the exception of the statutory Crown rates, the rail cartel was successful in obtaining more than adequate compensation for the imposed public obligations. In the case of the response of the cartel to technical change, the difficulty is in discerning whether the constraints imposed by the cartel or by the other imposed regulations thwarted the rate at which technical potentialities were exploited.

There are also problems with the measurement and interpretation involved in evaluating the performance of the cartel as indicated by the cost levels attained, the rates charged, the extent of excess capacity and the achieved rates of return. These are factors that limit the usefulness of considering the welfare implications of resource misallocation resulting from cartel practices.\footnote{Imprecision in measurement also presents difficulties in interpreting the shifts in returns between input suppliers, the railways and shippers, and the effect that these shifts have played in pressuring changes in the cartel. Essential to such interpretations are accurate measures of economic rates of return. Readily available data, however, permit the calculation of the ratio of net revenue to book value which is an accounting measure of the rate of return. Such accounting returns, however, cannot be assumed to be the same as the economic rate of return. The conditions for such an}\footnote{Measurement of static inefficiencies (deadweight loss), involving some notion of consumers surplus, require estimates of marginal cost and rate elasticities of demand. Estimates of both are rarely acceptable, and when they are, calculation of the surpluses and losses involve disputable aggregations of utilities.}
equality are highly restrictive,\textsuperscript{53} such that it would be improbable that the accounting rate equaled the economic rate of return that also equaled the present value of the entire net revenue stream with the initial capital cost. Yet measures of economic rate of return facilitate the evaluation of cartel power and market performance because it is the output restrictions under cartelization that produce the economic rate of return. Thus, accounting measures, while they must be considered inappropriate in evaluating market performance, can be used instead to infer whether one railway generates more dollars of profit per dollar of assets than another.

Such inferences also have to be qualified. There are problems of measurement common to most railways, such as the treatment of sunk costs,\textsuperscript{54} some of which are exclusive to the Canadian railways. In particular, the lack of compensation for the carriage of export grain could be expected to have reduced net revenue and to have caused disinvestment in branch lines and rolling stock. Given these substantial qualifications, the estimates of net revenue to book value for CN and CP for the period 1967-1980 displayed in Table V indicate a consistently higher rate of return for CP. Compared with similar measures of accounting rates of return from a selected list of 37 Class I U.S. railroads taken from a study by Keeler\textsuperscript{55} (see Annex 3), CP appears to have performed better than average, while CN appears to be in the bottom group. Over the period 1966/67-1970, out of 22 U.S. railroads, seven exceeded CP's average return of 6.4 percent and nineteen exceeded CN's average return of 3.62 percent. Twenty of the twenty-two railroads exceeded CN's average return of 3.7 over the period 1971-1975, but only nine exceeded CP's average return of 7.2 percent. During the period of 1976-1979, CP achieved an average return of 10.0 percent with CN having a 6.8 percent return. Some 12 railroads exceeded the average return of CP, and 21 of the 37 exceeded CN's. Of the two U.S. railroads which are slightly larger in rev-

\textsuperscript{53} Fisher and McGowan have established the conditions under which the accounting and economic rate of returns are equal. They state that,

\begin{quote}
  Unless the proportion of investments with a given time shape remains fixed every year, and unless the firm simply grows exponentially, increasing investments in each and every type of asset by the same proportion for every year, the accounting rate of return to the firm on a whole cannot even be expected to be constant, let alone be equal to the economic rate of return.
\end{quote}


\textsuperscript{54} Railways could be considered viable if their capital investments earned similar returns to those investments of comparable risks. Ideally, calculations of such opportunity cost of capital should consider separately sunk and other capital. The latter should be calculated at their replacement cost, measured at current prices using contemporary technology. As for sunk costs—such as the grading of land—they need never be incurred again, and hence the railway need earn only scrap or liquidation value on such capital.

venue freight, and smaller than CN and CP, namely Southern Pacific and Illinois Central Gulf, CP attained average returns in all periods in excess of both railroads, while CN exceeded both only in the period 1976-1979, having been third previously.

B. Markets and Rates

The pre-1967 cartel, subject to the Board's approval for rate changes and the requirement to maintain class rate equalization, was transformed into a rate discriminating duopoly. Free from rate regulation, the major exception being export grains, the two railroads responded by refining their value of service pricing. Typically, associations of shippers collectively negotiated rates on an annual basis with teams of negotiations from the two railroads.\textsuperscript{56} Rate levels were determined according to market and modal competition, with the variable costs of the particular movement providing a floor below which the railroads could not charge. In negotiating group or average rates, the shipper associations presented their members within particular zones with rate structures that were identical, irrespective of the rail carrier or location within the zones.\textsuperscript{57}

There was limited service competition between the two railroads, in part a result of the regulatory enforcement of separate rail markets. As competition was possible only when the line of the two carriers was available to carriers, the location of lines clearly limited shippers' choices, resulting in the use of trucks. Direct access to alternative rail carriers was available to those shipping within interswitching limits, while running rights possessed by a carrier extended the alternatives available to the shipper. Interswitching limited operations, for the most part, such that most shipping located within access to one line could only choose to deal with another located within four miles of a designated interswitching point.

\textsuperscript{56} The Canadian Freight Association (CFA), formed in 1883, is the body which collectively represents the Canadian railroads. For a description of the CFA and its workings, see COMPETITION AND REGULATION IN THE RAILWAY FREIGHT INDUSTRY Appendix 1 (Research Branch, Canadian Transport Commission, Report No. 1982/09E (May 1981)).

\textsuperscript{57} "For the purpose of negotiating rates, which requires a concerted effort with an industry over a relatively short period, collective action is vital. Shipper associations may be used by the railways for communication and negotiation with all industry members. . . . Shippers are often the ones who initiate these meetings between industry and the railways since it ensures one rate for all shippers—members, irrespective of their size and irrespective of distance from the mainline or from the market place."

"Collective negotiations do not preclude firms from seeking separate considerations from the railways either by agreements presented within or outside the collective process. However, if special situations are numerous, separate negotiations are appropriate. For example, the negotiation of rates on British Columbia's forest products to North American markets is carried out by the Transportation Committee of the Council of Forest Industries. The negotiation of rates on inbound products and supplies is conducted by the individual forest product companies."

\textit{CP Rail Position on Collective Rate Making} 26-28 (submitted to Transport Canada (1983)).
with that railway.58

Alternative rail carriers were more frequently available on cross-border routes than on domestic routes. Estimates for 1981 suggested that 35 percent of traffic by total freight billing, defined as traffic in which CN or CP participated and including American carriers, could have been subject to intra-rail competition. Of this figure, 19 percent was domestic and 16 percent was cross-border.59

The estimate was that 40 percent cross-border traffic was subject to intra-rail competition. The potential for competition differed across the country. The opportunities for rail competition was greatest in Eastern Canada, where over 40 percent of the originating and almost 40 percent of the terminating domestic and international traffic by revenue was potentially subject to intra-rail competition. In the Maritimes and the West, the percentages dropped to 24 and 28 and 23 and 32 percent, respectively.60

The collusion between the railways and the shipper committees could be seen to have facilitated the railways’ concentration on high volume, low value resource traffic. Moving into the carriage of long-haul, bulk commodities, the railways began to sell increasingly not to the market but to well defined specific shippers and shipper groups. Rate levels would appear to have moved towards a modified form of Ramsay pricing,61 in which shipper groups were charged a rate equal to the incre-

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58. Subsection 32(9) of the Transportation Act stipulates that where an agreement for an agreed change has been made between a carrier and a shipper, any other shipper may with the consent of the carrier become a party to the agreement. It would appear that transport law, as well as favoring the carrier over the shipper in issues of agreed changes and other rates, does not and has not granted shippers immunity from the anti-competes law in Canada. The Unfolding Debate on Competition or Collective Action in Canadian Railways, BUREAU OF COMPETITION POLICY—CONSUMER AND CORPORATE AFFAIRS (April 1984).

59. T. HEAVER, Competition and Collective Pricing Between Railways in Canada 57, Table 6 (prepared for Transport Canada, No. TP4302 (Jan. 1983)). There are reasons to suggest these estimates give lower rather than upper limits to the degrees of potential intra-rail competition. The data excludes for instance, the extent of extended rail competition facilitated by trucking services, some of which are owned by the railways. Secondly, the data fails to distinguish that portion of local traffic that could be classified as competitive because such traffic is aggregated with competitive traffic during negotiations between the railway and a shipper that has plants that are both competitive and local.

60. id., Table 9 at 61. These estimates, however, are the percentages of rail revenue arising from traffic between competitive stations by region. The distinction between intra-regional or inter-regional traffic is not made.

61. Ramsay pricing, a variant of value-of-service pricing, was established by F.P. Ramsay in his article entitled: A Contribution to the Theory of Taxation, 37 Econ. J. 47-61 (March 1977). Confirmation that the railways have practiced such policies is provided by Heaver and Waters, Public Enterprise Under Competition: A Comment on Canadian Railways, in MANAGING PUBLIC ENTERPRISES 156 (W.T. Stanbury and F. Thompson eds. 1982). A test of Ramsay pricing would be to estimate demands and marginal costs of the two carriers, calculate the so-called “Ramsay number” for each product, namely the percentage deviation of price from marginal cost times
mental cost of the service they received, plus a share of the fixed cost inversely proportional to the shippers’ elasticity of demand for the rail service.

Services were modified such that integrated rail-truck carriage was placed in competition with for-hire trucking. In accommodating this specialization, the railways applied and developed carriage equipment and operating technology. There was a movement away from general traffic equipment such as the box car towards specialized unit trains with their own advanced technical characteristics. The railways developed the unit train using robot power, solid trains, 100-ton covered hopper cars, large capacity mechanical refrigerators, bulkhead flat cars, and auto pack passenger and truck cars. Supplementing these advances in equipment were the introduction of automatic hump yards, centralization of control and communications, and the processing of rail computer technology.

Advances in technical application did not occur in all markets. The fixed Crow rate, along with the practices of regulating car deployment, served to retard advances in grain handling and distribution. The emergence of truck movement substituting for rail in the primary collection process and the replacement of inefficient small elevators alongside branch lines by inland terminals enjoying economies of scale and the deployment of low cost unit trains did not take place primarily because of the retention of the Crow rates. The fixed rates, below cost and the same for the small terminal on a branch line as for an inland terminal on the main line, meant the inland terminal operator could not capture the cost savings that would accrue to the railways from the introduction of the low cost unit trains.62

As well as experiencing protracted contractions in Prairie branch lines, the railways faced constraints in the use of rolling stock.63 The low returns from shipping grain had led to their disinvestment in rolling stock. Although the Canadian Wheat Board, a crown corporation, purchased grain hopper cars and permitted the railways to use them free of charge, the Board and not the railways continued to assign the cars to the particular elevators.

The retention of the Crow also constrained the railways’ exercise in Ramsay pricing. Grain shipments were charged rates below long run variable costs. Estimates made by Snively64 for 1980 suggested the long-run variable cost of shipping exceeded other Crow rates by a factor of

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63. Id. at 164.
64. Snively, 1980 Costs and Revenues Incurred by the Railways in the Transportation of Grain Under Statutory Rates (prepared for Transport Canada (1982)).
four (see Annex A.1), such that rates would have had to have risen from $4.96 to $20.41 per ton to have been fully compensatory. The revenue yielding a fully compensated variable cost for grain would have been $539.2 million. As $129.8 million was raised from the statutory grain rates, the revenue needed for full compensation would have been $409.6 million, or 11 percent of the two carriers' total freight revenue in 1980.

The rate levels established by the railways reflected the general demand for transport and the modal cross price elasticities. In general, manufactured goods, with their high value and low freight rates embodied in final good price, had less elastic general transport demand, but high modal cross price elasticities due to the availability of competing truck carriers. Owing to geographical factors that limited alternative modes and by exercising cartel constrained intra-rail competition, the railways appeared to have set rates on bulk commodities shipped from the West on the basis of general transport elasticities rather than on modal cross price elasticities. By 1981, total (direct and indirect) rail charges as a percentage of output (valued in producers prices sold domestically) were 7 percent for coal (38 percent for exported coal), 5.3 percent for iron mines and 8.1 percent for other non-metal mines (see Table VI). Among the manufacturing industries, the percentage for the shoe industry was 0.2 percent and 0.8 percent for motor vehicle manufactures (see Annex A.2).

As the long run costs of transporting export grain grew in excess of the fixed Crow rates, a growing portion of the railways' fixed costs could not be covered. Such costs had to be borne by non-grain traffic, and the railways could be expected to increase rates on traffic that exhibited less elastic demand for rail transport. Given these cartel established rates that

65. The elasticity of demand for transport is given by the product of the elasticity of the final-goods demand and the proportion of transport costs in the final goods price. Where there are competing modes, the actual demand for a given mode will depend on the modal cross price elasticities.

66. According to estimates made by Heaver, the following commodities had low percentages of railway revenue earned on competitive traffic:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Domestic Traffic</th>
<th>Total Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumber</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Sand and Gravel</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Gypsum</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Coal</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Phosphate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pulpwood</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sulphur</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Copper</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Railway revenue earned on competitive traffic is defined as that moving between competitive stations in Canada or as transborder traffic originating or terminating at competitive stations on CN or CP. Supra Note 59, Table 10 at 62.
maximized profits, the subsidization of losses on export grain by means of more "efficient" cross-subsidization of losses on export grain was not possible. The most efficient form of rate discrimination was being practiced. As a result of increasing grain exports, however, losses from the Crow rates increased, and as compensating rate increases on other traffic were not possible, downward pressure on the railways' rate of return could be expected to have occurred.

Elements within the Prairies, whose grain farmers, thanks to the Crow, were the recipients of what was in effect an income maintenance supplement, perceived the Crow to have two adversely distorting effects. Firstly, the retention of rates on export grains lower than for processed grain products created an incentive to export the former rather than the latter, which in turn discouraged grain processing industries on the Prairies. Secondly, it was perceived that bulk commodities, in particular coal and potash that were exported primarily from the West, bore not only a disproportionate share of the railways' fixed costs at the expense of the real incomes of the region, but also incurred the higher rates compensating for the revenue lost from transporting export grain at rates below long run marginal cost. There were two other related assertions concerning rate distortions perceived to be to the disadvantage of the West and the Prairies in particular. These were the so-called raw materials versus finished products and the long-haul, short-haul discrimination. It was asserted that as in the case of grain, further processing and manufacturing were hindered in the Prairies because finished goods were charged higher freight rates than raw materials. Long-haul rates, which usually applied to products shipped from Central Canada to the West Coast were often lower than rates to points on the Prairies because shippers faced water competition using the Panama Canal and low priced, offshore imports from Pacific rim countries.

Although empirical evidence modified or refuted most of these perceptions and assertions concerning the incidence of the railways' rate discrimination, they retained political credibility in the Prairies and were to play a part alongside the forces urging the dismantling of the cartel.

C. Capacity Utilization

To railways vertically integrated into carriage and track, and charac-

67. For a discussion of these perceptions regarding rates, see K. Norrie, Western Economic Grievances—An Overview with Special Reference to Freight Rates (paper presented to the Workshop on the Political Economy of Confederation in Ontario and sponsored by the Economic Council of Canada and the Institute of Intergovernmental Relations at Queen's University on Nov. 8-10, 1978).


69. Id.
terized by economies of scale and scope over ranges and combinations of outputs, Ramsay pricing offers the prospect of acceptable cost recovery. So long as the rate charged to the price elastic shipper is higher than the incremental cost of the service, the rate contributes to the railways' fixed costs.\footnote{70}

While yielding advantageous outcomes, such rate discrimination also produced sets of rates at demands that under utilized capacity. The retention of rates on export grain at below variable costs also placed a constraint on the railways' exercise of Ramsay pricing that added to the creation of excess capacity. Similarly, the constraints imposed by government on the railways' withdrawal from freight and passenger markets at a time of increasing productivity in carriage contributed to excess capacity in track.

Constituent parts of the rail network, such as track, locomotives, cars and marshalling yards, can be conceived as having a range of outputs, beyond which average or incremental costs rise. Determining and estimating these ranges has not been attempted. Instead, assuming that optimal flow (supply) is proportional to capital stock, measures of the use of track and rolling stock have been estimated in an attempt to obtain an indication not of the potential capacity of the railway network, but rather an indication of the average use of its constituent parts and their relationship to changes in demand, abandonment and labor policies.

Contemporaneous changes in motive power and rolling stock saw shifts away from steam into the more powerful diesel-electric locomotion and a movement away from the requirement of commodities to fit into the freight cars available into equipment built specifically for commodities. Introduced in 1948, diesel-electric locomotives had replaced steam by 1965, their average horse power reaching 1,917 in 1975 and rising to 2,056 in 1981.\footnote{71} In rolling stock, there was a movement away from box cars towards specialized cars such as piggybacks, refrigerated cars, hopper cars and unit trains.\footnote{72} In piggybacks, the unit of transport is the track trailer instead of a box car, making the service available on a door to door basis. As a result, the piggyback permitted the combination of

\footnote{70. In terms of welfare, raising prices maximizes the consumers surplus and provides the lowest average rates, subject to the requirement of economic adequacy for the carrier. They minimize the amount of sales reduction caused by rates rising above marginal costs and thus minimize the violation of the rule that any output should be produced that covers its resource cost.

71. \textit{Supra} Note 39.

72. \textit{id.} In 1958, 6 percent of CN's total freight cars were hopper cars. \textit{Railway Transport}, Statistics Canada, Cat. No. 52-209 (1958). By 1981, the percentage had risen to 21 percent, while the respective figures for flat cars were 5 and 13 percent. CP's fleet had 8 and 5 percent, respectively, of hopper cars and flat cars in 1985 and 21 and 10 percent by 1981. \textit{Railway Transport}, Statistics Canada, Cat. No. 52-209 (1981).}
lower terminal costs of trucking with the lower line haul costs of rail. Unit trains were developed to enable more efficient transport of coal, the longer trains allowing substantial reductions in switching expenses. Hopper cars, with their large capacities, yielded lower costs of carrying grain by their facilitation of higher utilization, lower maintenance and reduced terminal costs.

In aggregate, average freight car capacity reached over 66 tons in 1980, an increase of over 27 percent over the average for the period 1958-1967 (see Table VII). For the most part, utilization of freight cars over the period 1967-1980 showed a steady increase, with downturns occurring with the economy in 1975, as did car load factors (see Table VII). While increased productivity resulted from greater average payloads and higher utilization, much of the technical change contributing to this increased productivity, such as improved rolling stock, electronic control and improvement in maintenance, also contributed to excess capacity. More traffic could be carried on fewer roadways.

Measures of output and track utilization—revenue ton-miles and freight and passenger train ton-miles—indicate a not surprising close correlation between output and utilization (see Table VII). Yearly movements since the passage of the NTA suggest a trend of increasing utilization, with a downturn in output and utilization in the mid-1970's. In the early 1960's, ton-miles per mile of track began steadily to rise as a result of increasing demand without significant increase in track mileage. After 1975, track mileage started to decline, while demand increased, resulting in rapid increases in ton-miles per mile of track. Although CP achieved a higher rate of utilization than CN, the gap narrowed in the late 1970's in part because CN was able to shrink its route mileage over the period 1975-1980 by 6.7 percent in comparison with CP's reduction of 5.0 percent.73

D. Labor Productivity and Total Factor Productivity

The introduction of the diesel locomotive, higher capacity freight cars, improved signals and automated classification yards permitted the operation of longer, higher capacity trains requiring smaller crews. Automation of train control and clerical operations further reduced manpower requirements, thereby adding to the potential for negotiation between unions and the railways.

Threatened by unemployment, organized labor, which by 1950 represented 90 percent of the workers74 in the industry, was resistant to

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73. Id.
74. A. W. CURRIE, CANADIAN TRANSPORTATION ECONOMICS 689, Note 2 (1967).
change. \(^{75}\) Elaborate work rules had been built up, the result of successive bargaining by the unions in response to occupational risks. In the face of irregular operations, in which work assignments had led to discrimination and favoritism, the unions had bargained for seniority. Work rules and seniority constituted a rigid system, and this was no more than existed in the running trades (locomotive engineers, firemen, conductors and trainmen). Remunerated on a dual basis, \(^{76}\) combining miles traveled and time taken, the running trades entered the 1970's, almost two decades since the widespread introduction of the diesel engine, with a payment system that was based on the much slower steam engine. Senior employees, with their first choice of runs, received high wages or, by limiting their monthly wages, lengthy periods of leisure.

Union-railway agreements have generally provided for uniform scales across the country and have usually been based on historical relationships between trades. Rail rates of pay differed substantially from regional averages (see Table VIII). \(^{77}\) In the case of the Maritime provinces, rail wage rates were considerably in excess of the average wage. \(^{78}\) Such a rail wage structure, however, complimented a general government policy that instead of permitting lower wage rates in regions of heavier unemployment, it favored reductions in non-labor input costs. Transport costs, for instance, on goods exported from the Maritimes were fixed by statute at low levels with the understanding that they would increase the region's export sales, and which in turn would enhance employment, income and growth.

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75. In 1965 CN ordered crews to "run through" a number of terminals in Northern Ontario and Alberta. Terminals were approximately 100 miles apart, and were established at the turn of the century when steam engines of the time had to be serviced frequently. It took crews approximately 8 hours to complete a run of this length, with some allowance for signing on and off work and checking the equipment. Diesel locomotives, in contrast, needed not to be served so frequently, and crews often completed runs of 200 miles or more within 8 hours. Although the running trades were paid such that the longer runs did not result in any reductions in remuneration, the unions faced loss of jobs at the threatened stops and claimed that CN had been heavy handed in their introduction of the changes. The dispute was investigated by Mr. Justice Freedman, who recommended procedures for negotiation between unions and the railways over technical change. S. Freedman, Report of the Industrial Inquiry Commission on Canadian National Railways "Run-Through", (Ottawa, Queen's Printer (1965)).

76. M. Flood, Payment Systems and their Development in the Railway Running Trades (Economics and Research Branch, Canada Development of Labor, Ottawa, Queen's Printer (1968)).

77. For an example of the effects of national wage and work rule agreements, see Simpson and Peters, The Economics of Mileage Restrictions for Railway Workers in Western Canada, 38 Relations Industrielles 95-103 (1983).

78. In 1980, the average weekly wage in Canada was $317.38, while in Newfoundland it was $288 and in New Brunswick it was $283. The average weekly wage in CN equipment maintenance was $391.40 a week. Railway Transport, Part III, Employment Statistics, Statistics Canada, Cat. No. 52-212 and Canadian Statistical Review, Cat. No. 11-003.
The relatively high wages earned by railway workers in the areas of higher unemployment intensified the pressure to resist manpower reductions, with the result that government as well as the participants in the bilateral negotiations played a role in the resolution of labor deployment. CN, the crown carrier with its inherited capacity in the higher areas of unemployment in the East, was to incur more frequent intervention from the government. 79

Although there was a growth in revenue ton-miles and a drop in employment of 30 percent between 1967-1980, the average payroll remained roughly the same percentage of total expenses until the advent of VIA (Table VIII). Such proportions testify to the success of the unions at retaining labors' share of the cartel's return and their priorities of sustaining wage rates and work rules rather than employment levels. Although CN initiated its "profit centres" policy in the mid-1970's, 80 examination of the employment figures for the whole of the period 1967-1980 indicates CP was able to reduce employment at a greater rate than was CN. By 1980, total employment at CP was down by 44 percent over the average for the period 1960-1967, while CN's was down by 25 percent (see Table VIII).

An examination of labor categories suggest differences in employment levels between the two carriers according to whether labor contracts were the result of joint CN-CP negotiation with the unions or between the individual carrier and the union. The latter category included contracts in road and equipment maintenance. While CN was able to reduce its employment in road maintenance over the period 1967-1980 by 12 percent as against CP's 14 percent, it actually experienced an increase in employment in equipment maintenance of 2 percent as against a contraction of 10 percent by CP. In contrast, employment in road freight crews, with which work rules were governed by jointly negotiated contracts, CN achieved a reduction in employment of 12 percent as against 2 percent by CP. 81

Using unweighted aggregates of revenue passenger miles and freight ton miles, indicators of average labor productivity suggest that CP had a 25 percent greater average labor productivity than CP by 1980 (see Table IX). The inability of CN to reduce its employment in the categories

79. Supra Note 28, at 199-205. CN started in 1923 with a number of insolvent carriers. The government later imposed the unprofitable Hudson Bay Railway and the Newfoundland Railway. See also, Gord Crann, "Crosbie in Line for Dreaded Hatfield Phone Call", Toronto Star, July 6, 1986. The latter article outlines the difficulty CN has encountered in downsizing their locomotive repair shops in New Brunswick.

80. Under its president, Robert Bandeen, CN in the mid-seventies implemented its so-called autonomy strategy by re-organizing into a number of "profit centres". They included rail, trucking, express and communication. Kent Weaver, op. cit., pp. 183-184.

81. Supra, Note 78.
of equipment and road maintenance overhead as quickly as CP is reflected in lower labor productivities. In the case of labor directly employed in rail passenger transport, although CP was able to reduce employment at a faster rate than CN—by 46 percent—the substantially longer passenger hauls of CN meant the crown carrier enjoyed higher productivity. The more rapid reduction in manpower in the category of road freight crews achieved by CN was reflected in the crown carrier’s relatively higher productivity.

Such partial indicators of labor productivity have the major limitation of being unable to account for the effects of other input levels on labors’ productivity. Measures of total factor productivity (TFP), calculated by measuring the ratio of total output to total economic resources used, offer a broader index of productivity, which is defined as the change in output not accounted for by the change in input. TFP is an aggregate measure of productivity, of which an increase in efficiency gained by the exploitation of a shift in the cost function is only one component. Three other probable component sources of increase in output are technical progress, the underlying characteristics of the production process, such as scale economies, and the deviations between marginal costs and rates.

In calculating the cost function of railroads similar to CN and CP, Caves and Christensen concluded that in the region of freight and passenger output levels produced by the two Canadian railways, the hypothesis of constant returns to scale could not be rejected. By assuming the two railways exhibited constant returns to scale, the authors implied that scale effects did not contribute to the railways’ productivity, thereby inferring that measures of TFP provided them with measures of productivity that could be interpreted as being due to improvements in technical change and managerial efficiency.

Interested in the relative efficiency of the government owned as against the privately owned railway, the authors attempted to use TFP as a measure of efficiency, testing which of the two railways operating in a competitive market was the more efficient.

The authors’ estimates of TFP indicated that: although the CN had a lower level of total factor productivity at the beginning of the period it has caught up with the CP by 1967; thereafter the CN record of productivity growth was approximately equal to that of the CP.

82. It is considered that the costs of passenger service, as well as differing with the degree of comfort and service provided, decrease with the length of the passenger trip because terminal costs decline as the length of the trip increases.


84. 88 J. of Poli. Economy 958, 974, supra Note 83.
The authors ignored the existence of the Canadian rail cartel, contending that the railways were engaged in intramodal as well as intermodal competition:

Not only was the CN instructed to operate on a commercial basis under a management insulated from politics, it was also placed in direct competition with both the privately owned railroads and with highway and water transport.\(^{85}\)

Their conclusion was as follows:

public ownership is not inherently less efficient than private ownership—that the oft-noted inefficiency of government enterprises stems from their isolation from effective competition rather than their public ownership per se.\(^{86}\)

In a later study, Caves, Christensen, Swanson and Trehway\(^{87}\) extended the data from 1975 and 1979 and, more significantly, redefined the relationship under study. They inquired into the effects on economic performance of ownership (public versus private)\(^{88}\) and regulation, rather

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85. Id.
86. Id.
88. Government owned, the CN could be expected to behave and perform differently than the privately owned CP. The possible differences spring from differences in ownership. In a firm managed largely by non-owners, there can be expected to be a divergence between the manager’s decision and those that would maximize the welfare of the owners. Bearing only a fraction of the costs of the non-pecuniary benefits that non-owning managers will want to accrue, there will be a divergence between the managements’ decisions and those that will maximize the value of the owners’ firm. The divergence between the maximum value desired by the owner and that actually achieved by the non-owner manager will depend substantially on the costs incurred by the owner in monitoring the management. The owner will tend to equate marginal costs of monitoring with the additional wealth resulting from the reduction in managements’ non-pecuniary benefits. The assiduous pursuit by the owners in minimizing this divergence can be expected, furthermore, to be independent of the market structure within which the firm operates. Owners of a monopoly can be expected to be just as assiduous in pursuit as owners of firms facing unregulated competition. See Jensen and Meckling, Theory of the Firm: Managerial Behavior Agency Costs and Ownership Studies, 3 J. of FINANCIAL ECON. 305-360 (1976).

Different forms of ownership may, however, alter the assiduity and also the form and effectiveness of the monitoring. Owners of transferable assets are subjected to valuation in the market in traded shares. Subjection to such market valuation presents a standard to owners of such assets with which to gauge the performance of management. Owners can exchange their assets and change managements. The citizen, whose government acts as custodian for government enterprises, owns the assets but is unable to transfer them. Unlike owners of transferable assets, the citizen is without the standard of the market values of his assets. If he wishes to change management he has to act via the firms’ custodian, his elected representative, the government. The citizen has to rely on the assiduousness of his elected representative in minimizing the accrual of non-pecuniary benefits and in implementing effective substitutes for market valuation. The ballot box presents the citizen with a means of evaluating the performance of his firms’ custodians.

Government enterprises often have explicit objectives, expressed in policy statements, and implicit goals, that are not pecuniary, and which management is expected to fulfill. When there is
than competition. Regulation, according to the authors, by restricting freedom to enter or exit from specific markets or to set prices on services, prevents firms from freely competing in their product markets. The authors suggest Canadian railways had been directly competitive for over fifty years:

These two railroads (CN and CP) are roughly equal in size, and have been direct competitors throughout most of Canada since the 1920.\textsuperscript{89}

TFP growth rates suggested no substantial differences between CN and CP, prompting the authors to suggest that rather than ownership, regulation and in particular a lack of rate regulation has provided the Canadian railways with a flexibility in offering services and rates that had led to their higher productivities over the regulated, privately owned American railroads.

A later study by Freeman \textit{et al.},\textsuperscript{90} which measured gross TFP, and hence did not infer from the measurements the relative efficiencies of the two carriers, observed (see Table X) that CN had higher growth rates than CP during the 1960's, while during the 1970's the order was reversed.\textsuperscript{91} Roy and Cofsky's gross TFP estimates found that aggregate inputs fell by an annual average of 0.6 percent for CN and 0.9 percent for CP over the period 1960-1981, while aggregate outputs grew by 3.1 percent and 3.0 percent respectively.\textsuperscript{92} Over the period 1970-1981, the average annual change in TFP of both railways was estimated to be 2.9 percent (see Table X).

Measurements of TFP such as these provide a number of observations. Firstly, with only two comparable carriers, there are formidable statistical difficulties involved in decomposing gross estimates of TFP. It would appear that while increased productivity was accounted for by improvements in technology, managerial efficiency and the quality of the inputs, it was not possible to ascribe the relative contribution of these factors.

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\textsuperscript{89} Supra Note 87, at 124.


\textsuperscript{91} Id. at 761.

\textsuperscript{92} CTC, \textit{The Productivity and Cost Structure of Firms within the Rail and Air Transport Industries, Transport Review, Trends and Selected Issues 82} (Research Branch, Cat. TT12-5/1985 (1985)).
Consequently, TFP estimates must be considered as inadequate tests of relative carrier efficiency. Secondly, the rail cartel was able to substantially reduce inputs of labor and fuel, while the annual average growth rates of TFP showed a substantial degree of association with changes in output and consequent changes in utilization. Thirdly, most estimates of average annual growth rates of gross TFP suggest from the late 1960’s CN’s productivity, which had lagged behind CP’s, approached that attained by CP. From the middle of the 1970’s, CN’s productivity equalled and in some years exceeded that of CP’s. The convergence of productivities, rather than being caused by the competition between the two carriers, would more plausibly appear to be a result on the demand side of the government owned carrier practicing discriminatory, cartel pricing policies within an explicitly legally supported structure since 1967, and on the supply side of adopting profit oriented policies in the mid-1970s and successfully shedding substantial parts of its labor force and some of its uneconomical branch lines.

As a result, the Canadian railways, unlike the American railroads, were able to discriminate between markets which in turn facilitated the selective introduction of more efficient equipment which could not be justified in all markets. In contrast, the American railroads were dissuaded from introducing lower cost equipment in selective markets because regulation stipulated reduced rates across markets, including markets which did not warrant decreases. 93 Alternatively, collective rate making by Canadian railways, in which the lower cost carrier agreed to charge a higher rate to accommodate the higher cost carrier, could have similarly thwarted the introduction of lower rates that were reflective of efficiencies stimulated by technical improvements.

V. STAGGERS AND THE CANADIAN-U.S. RAIL CARTEL

Prior to the 1980 Staggers Rail Act, a congruity94 existed in the cartel supporting regulatory systems of Canada and the United States. For the most part rail traffic between points in both countries and overhead traf-

93. According to MacAvoy and Sloss, the estimated 5-year delay in introducing unit trains on eastern railroads was in large part due to the unwillingness of the I.C.C. to permit discriminatory rates for similar services or commodities to meet certain competitive situations under existing technology. Instead, the I.C.C. required that cost savings from innovations be applied by the carriers without discrimination to all shippers using similar services. Hence, unless the savings on the unit trains were sufficient to offset revenue reductions on traffic that moved at higher rates, the innovation could not be adopted. P. MACAVOY & J. SLOSS, REGULATION OF TRANSPORT INNOVATION: THE I.C.C. AND UNIT COAL TRAINS TO THE EAST COAST 59 (1967).

94. Since 1967, however, Canadian policy unlike the U.S. had been to facilitate intermodal competition.
fic were subject to international joint through rates, which in turn were filed and published. Enjoying immunity from antitrust and anticombines legislation, joint through rates were set collectively by the railways and at levels that preserved parity with the longer hauls in the domestic U.S. market. The result was an equalization of rate levels over numerous route combinations.

In practice, if an international joint through rate originated in Canada, the proposal was taken to the Canadian Freight Association for approval. If supported, the rate would then go to an international rate bureau, consisting of the two Canadian railways and the American railways effected directly or indirectly by the proposed rate. American carriers would deliberate as to whether the proposed rate threatened their existing traffic, and would in turn insist that the rate had parity with their comparable domestic routes. The originating carrier tended to determine the choice of the route. Southbound traffic moved over the Canadian railways' preferred routing, which was usually the longer route in Canada. Approval would be followed by a secret apportionment of the revenue among the carriers participating in the traffic. With such a "division" settled, the rate would be filed with the CTC and the Interstate Commerce Commission (ICC).

Rejection by the tariff bureau would leave the alternative of taking independent action, involving the combination of rates to and from the international border. As such action would have caused conflicts with dissenting railways, it was rarely undertaken. In general practice, the CTC granted changes in rates in the Canadian portion of the international rates whenever the ICC decided to do so on the U.S. portion of the rate.

Of the $48.1 billion in Canadian exports to the United States in 1980, rail carried 28 percent. Fifteen percent of the $7.1 billion in United States' exports to Canada were carried by rail. Although high percentages, they had been falling, with comparable estimates indicating that in 1964, 44 percent of Canadian exports to the United States were carried by rail.

95. Canadian overhead traffic is that which originates and is destined for points in the United States but part of which is carried through Canada on a Canadian carrier.

96. The rates were established with a view to competing with the trucks. In the case of northbound traffic, trucks offered stiff competition, for practically all major eastern Canadian markets were situated within trucking distance of the originating points in the United States.

97. As the joint international rate is an indivisible one, a lower rate on traffic from say Vancouver to Baltimore than from Seattle to Baltimore would cause complaints from shippers in Seattle of a loss of business in Baltimore as a result of "discrimination". Protection of shippers using their line and protection of their own revenue would cause the American rail carriers to press for parity between the international and U.S. domestic rate.

and 38 percent of Canadian imports from the United States. 99

Staggers diminished much of the regulatory support to the U.S. rail cartel. Exemption from rate regulation was removed from a substantial portion of traffic, confidential rates and rebates were permitted on much traffic, and intramodel competition was encouraged. By removing the antitrust immunity formerly enjoyed by U.S. carriers, Staggers exposed collectively established international joint rates to the Sherman Act. 100

The removal of rate transparency placed the American railroads at a competitive advantage over the Canadian carriers. Knowing the published rates of the Canadian carriers, American carriers were able to win traffic by striking confidential contracts and offering rebates on their long-haul route. Unable to make confidential contracts and to offer rebates, Canadian carriers saw an increasing portion of their $870 million U.S.-Canadian rail revenue 101 eroded as shippers moved away from the Canadian long-haul routes on to the shorter more direct routes to and from the United States.

A. Breaches in the Canadian Cartel

In response to the growing competitive pressure from American rail carriers, the Minister of Transport requested the CTC to report on the implication of Staggers. Commissioned in July 1983, a preliminary report of inquiry was released to the public for comment in April 1984. The inquiry officers, after reviewing the evidence, stated they were not persuaded "that changes in Canadian law are necessary or desirable." 102 The Minister of Transport responded, however, by requesting a further and broader inquiry in which a panel of three from the Railway Transport Committee was appointed. A Staff Report, 103 outlining issues of concern was released in August 1984, and in the same month a series of public hearings were held, ending in October 1984.

A Final Report of the Committee dealing exclusively with international traffic was issued in December 1984. 104 The Committee recommended carriers be allowed to enter confidential contracts with shippers on the

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Canadian portion of the movement of rail traffic between Canada and the United States. Such contracts were recommended to be filed with the CTC and were to be published in summary form. The railways were not to collude in setting such contracts. It was recommended that overhead traffic, involving freight originating and destined for points within the United States but which travels via Canada, no longer be subject to tariff regulation.\textsuperscript{105}

Such measures, if implemented, would have limited the cartel's power over international movements but would have left it intact in the domestic market. The result would have been a dual regulatory system, much to the advantage of those shipping from the U.S. into the Canadian market and to the disadvantage of Canadian shippers competing in the domestic market. Partly in response to this possibility, the Minister of Transport requested the Committee, in February 1985, to broaden the set of issues by considering the implications of regulatory charge on the domestic rail market.\textsuperscript{106} The inquiry commenced in March 1985 and reported in June 1985.

Of the 20 shipper associations giving testimony,\textsuperscript{107} 15 advocated the introduction of confidential contracts, increased intrarail competition, the removal of rail collusion over rates and immunity from the anticompetes legislation.\textsuperscript{108} Among the strongest advocates of domestic rail deregulation were the Canadian Chemical Producers Association, the Canadian Manufacturing Association and the Motor Vehicle Manufacturing Association. Dissent was expressed by some associations who perceived their members to be captive to a rail carrier and with no prospects of alternative, competing modes. The Coal Association of Canada expressed such concerns, as did the Council of Forest Industries of British Columbia, who also stated that while 45 of their members opposed deregulation, 62 were in favor.\textsuperscript{109}

Eight of the 34 individual shippers giving testimony opposed either confidential contracts, intrarail competition or both. Michelin Tires (Canada) Ltd. opposed confidential contracts because it believed it should

\textsuperscript{105} \textit{Id.} at 33-36.

\textsuperscript{106} CTC, \textsc{Minister of Transport, Inquiry into Effects in Canada of U.S. Rail Deregulation, Implications for Canadian Domestic and Import/Export Rail Traffic, Final Report 1, Cat. TT32-6/3-1985} (June 1985).

\textsuperscript{107} \textit{Supra} Note 106, at Appendix B, Cat. TT32-6/4-1986E.

\textsuperscript{108} In a random sample of 412 companies taken from CN and CP's customer listings by E. M. Ludwick and Associates for the Bureau of Competition Policy of Consumer and Corporate Affairs Canada, the following conclusion was drawn:

There is a consensus among rail users surveyed for a significant limitation on the ability of the railways to set prices collectively. In the rail users view, collective rate making should be allowed only on through interline (or joint) rates.

\textit{Supra} Note 58, at 281.

\textsuperscript{109} \textit{Id.} at 70. See also \textit{Supra} Note 107, at 70.
know what its competitors were paying for transport.\textsuperscript{110} Dofasco, Canada's largest fully integrated basic steel producer, argued that if confidential contracts were permitted, CP, which controls Algoma Steel, might offer its steel subsidiary, "an attractive rate, possibly to the detriment of the other steel producers."\textsuperscript{111}

Stelco, a steel producer, in its testimony strongly supported deregulation and commented that it did not perceive that CP negotiating confidentially with Algome would be to Stelco's disadvantage.\textsuperscript{112} Ontario Hydro advocated confidential contracts, and under cross-examination, revealed that Canadian coal was costing 50 percent more than American coal, a substantial portion of which was related to transport costs.\textsuperscript{113} The most forceful case for deregulation was presented by the Potash Corporation of Saskatchewan Sales Ltd., which stated that 40 percent of their delivered price was accounted for by transport costs.\textsuperscript{114} The Potash Corporation went beyond advocating intra-rail competition by arguing for a considerable expansion in carrier running rights. The Saskatchewan government also testified strongly in favor of rail deregulation, although representatives from the two other Prairie governments were opposed.

The Commissioners recommended the extension of confidential contracts and rebates to Canadian shippers and carriers. In contrast, while recommending that the railways should not collude over confidential contracts, they recommended collective rate making should continue to be allowed,\textsuperscript{115} although in a modified form. They recommended that the essence of Section 279 of the Railway Act should be retained, but with the "'cost'" portion separated from the "'rates'" portion and that Section 279 should not apply to allow the railways to exchange rate information.\textsuperscript{116} It was further recommended that the railways should remain exempt from the anticombines legislation.\textsuperscript{117} In line with their reluctance to extend intramodel competition, the Commissioners stressed the practical operational and safety consideration of extending the use of tracks to other than established railway companies, and recommended no changes to the current legislation relating to running rights.\textsuperscript{118}

\begin{flushleft}
\textsuperscript{110} Id. at 126.
\textsuperscript{111} Id. at 106.
\textsuperscript{112} Id. at 149.
\textsuperscript{113} Id. at 138. Ontario Hydro revealed that it spent $1 billion on fuels, 30 percent of its revenue, of which two-thirds was on coal. One-third of the coal came from Western Canada, the other two-thirds from the United States. Id. at 137.
\textsuperscript{114} Id. at 140.
\textsuperscript{115} Supra Note 106, at 43.
\textsuperscript{116} Id. at 42.
\textsuperscript{117} Id. at 43.
\textsuperscript{118} Id. at 40.
\end{flushleft}
B. The Removal of Legislative Support to Collusion

The government in the meantime formulated its own response in July 1985, with the publication of a policy paper on regulatory reform. The White Paper, Freedom to Move,\textsuperscript{(119)} endorsed the proposals of the CTC allowing confidential contracts on domestic and international rail routes\textsuperscript{(120)} but argued against retention of Section 279 of the Railway Act, which enables the carriers to exchange cost information and establish common rates.\textsuperscript{(121)} The proposed removal of the legal supports to the rail cartel were accompanied with recommendations to both encourage intramodal competition\textsuperscript{(122)} and to enhance the position of the captive shipper\textsuperscript{(123)} (see Table XI). The Paper proposed to allow shippers captive to one rail line to have access to the lines of competing rail carriers through provisions in legislation for a joint-line rate from the traffic's origin to its destination.\textsuperscript{(124)} Further increases in intramodal competition were to be encouraged by the proposal to empower the Governor in Council, where "considerations of the economy and efficiency of the rail system justifies,"\textsuperscript{(125)} to impose upon the railways joint-track usage or shared running rights. The new regulatory agency would be authorized to determine appropriate compensation for the use of the right of way concerned.

Following extensive hearings held by the House of Commons Standing Committee on Transportation, the Minister of Transport tabled, in June 1986, Bill C-126. As in the White Paper, the Bill proposes to eliminate collective rate making and exemption from the anticombines legislation, and permit rebates and confidential contracts, the latter to be filed with the proposed new National Transportation Agency (the Agency). Summaries of the non-confidential components will be published. The Bill, unlike the White Paper, proposes in the public interest to permit investigations concerning confidential contracts. Agreed changes, which the White Paper proposed to remove, will continue "primarily as a transition measure, since a number of shippers currently benefit from them."\textsuperscript{(126)}

Similarly, the Bill, unlike the proposal in the White Paper, retains minimum rate regulation "in the interest of fair competition between railways and between truckers and railways."\textsuperscript{(127)}

\textsuperscript{119} Supra Note 4, at 4.
\textsuperscript{120} Id. at 33.
\textsuperscript{121} Id. at 34.
\textsuperscript{122} Id. at 36-37.
\textsuperscript{123} Id. at 35.
\textsuperscript{124} Id. at 36.
\textsuperscript{125} Id.
\textsuperscript{126} Freedom to Move: The Legislation Overview of National Transportation Legislation 1986 p. 8, Transport Canada, No. TP7746 (June 1986).
\textsuperscript{127} Id.
Minimum compensatory rates will be deemed to be those covering the variable cost of the movement of the traffic concerned. Appeals to the Agency, which is empowered to require the carrier to substitute a compensatory rate, is seen as a means of preventing predatory pricing.\textsuperscript{128}

The means of increasing intrarail competition largely follow the proposals contained in the White Paper. If considered to be in the public interest, the Governor in Council may request a railway to consider joint or common use of the same right of way.\textsuperscript{129} The interswitching limit is to be increased from 4 to 18 miles (30 km). Within 30 miles (50 km) of any interchange point, a carrier will be able to exercise "terminal running rights" by seeking to pick-up, carry and deliver over the tracks of another railway.\textsuperscript{130} Shippers captive to one carrier and at a considerable distance from an interchange point will, if they are able to arrange a deal with a second carrier, be able to apply to the Agency to establish a competitive line rate to the interchange point.\textsuperscript{131}

In line with recommendations contained in the White Paper, Bill C-126 proposed a shortened process of application for abandonment of non-protected branch lines, a consideration of alternatives to abandonment, and a specification of costs and subsidies. A railway must give at least 90 days notice that it intends to apply for abandonment,\textsuperscript{132} and when the notice is received, shippers and other interested groups have 60 days to file an objection.\textsuperscript{133} The Agency, however, may consider alternatives to abandonment, such as approving sale of the branch line to another operator,\textsuperscript{134} or providing assistance not to the railway but to shippers, provincial governments or others to develop less costly means of transport.\textsuperscript{135} Alternatively, the Agency may recommend to the Minister to order one railway to interconnect its branch line with another railway.\textsuperscript{136} If such alternatives are deemed unsuitable, but it is decided the line has economic potential, then it will be retained with a subsidy for three years and will then be reviewed again.\textsuperscript{137} In such calculations, branch line costs have been defined to include only those costs directly incurred by the railway in operating the line. If the line is deemed not to have economic potential, the line will be abandoned within six months after the

\begin{thebibliography}
128. \textit{Supra} Note 5, at § 113.
129. \textit{Id.} at § 148(4).
130. \textit{Id.} at § 149(1).
131. \textit{Id.} at § 134(2).
132. \textit{Id.} at § 160(1).
133. \textit{Id.} at § 161.
134. \textit{Id.} at § 177.
135. \textit{Id.} at § 175.
136. \textit{Id.} at § 173.
137. \textit{Id.} at § 171(1).
\end{thebibliography}
VI. RAILWAY COMPETITION NOT CARRIER COMPETITION

The proposed legislation would appear to reverse the protectiveness of much of the regulation and to transform the role of the regulatory Agency. By removing the exchange of cost information and the setting of common rates, the 1986 National Transportation Act withdraws the legislative protection afforded the fifty year old rail cartel. The Agency, with its proposed direction over running rights, joint-track usage and joint-rates, is empowered to facilitate rather than limit intramodal competition. While empowering the Agency to establish competitive joint-rates for the captive shipper, the legislation suggests that intra-rail carriage will be insufficient to provide competitive rates. The Agency can be expected to be a more stringent regulator of rates than its predecessor, the CTC, by regulating rates to the captive shipper and establishing minimum, compensatory rates.

Despite the expected role of the Agency in facilitating intra-rail competition for captive shippers, the incidence of such competition can largely be anticipated in markets where shippers perceive benefits from intrarail competition. In markets where rail competition is possible, such as is available to urbanized manufacturing plants in Eastern Canada, rates can be expected to move downwards from the cartel rate towards the costs of the lower cost carrier. There would, however, appear to be little incentive for the railways to initiate direct, intra-rail competition. Although carriers are unable to engage in collusion, the legislation, by permitting confidential contracts and rebates, facilitates individual carrier rather than cartel rate discrimination. The overall result of some markets in which rail competition will be stimulated by shippers and in others in which the railways will engage in individual rate discrimination will be a rate structure devoid of the vestiges of rate parity that existed under the collective, blanket rate structures. Instead, it will be characterized by differential rates reflecting relative advantages of shippers and regions competing in an increasingly competitive, continental market.

Indeed, there are doubts whether the proposed measures to release intramodal rail competition will sustain increasing carrier competition. Although shippers' choices could be expanded by extending running rights, thereby providing alternative routing and increasing the competition for carriage, the industry would still consist of a duopoly, with the two railways each possessing their own track along with exclusive rights to operate.

The potential malfunction of competition within such a market struc-
ture springs in part from the sunk costs incurred by the railways and some shippers. The railways' sunk costs, such as grading of the land on which the track rests, along with the specificity and longevity of much of the capital embodied in the track, present barriers to entry. The sunk costs of the shipper makes them captive to a single carrier. Possessing exclusive right of carriage over their track, the railways are able to limit competition in carriage. With restricted entry and exit of suppliers and shippers, such a market structure is far from contestable. Furthermore, there is uncertainty as to the resulting outcome of competition between just two suppliers of rail services, one of which is government owned and financed.

Such uncertainty, however, can be expected to be negligible because the proposed policy essentially involves removing the legal support to the rail cartel without substantially increasing carrier competition. The proposed measures to increase carrier competition are to extend running rights and joint track usage. They will not be extensively granted, for while recognizing the necessity of such practices "as appear just or desirable to the Agency, having regard to the public interest," the Bill states the Agency will "report on whether significant efficiency and cost savings would result from such joint or common use." It is uncertain who will request joint running rights and joint track usage. It is difficult to envisage the Agency extending the running rights if there are no requests from shippers or the railways. The most probable source of requests will come from shippers who perceive they can gain from striking a confidential contract. The railways can be expected to adhere to their markets, attempting to retain their shares, rather than invading their rival's market by offering shippers attractive, confidential rebates and requesting running rights. An active market in running rights could only be expected to develop if there were a substantial number of competing carriers operating rolling stock for-hire or for private shipments.

VII. RECOMMENDATIONS

The proposed legislation would appear to remove the legal incongruity between Canadian and American railway practice while only marginally increasing rail competition. Consequently, the proposals will not satisfy one of the Bill's prime objectives of encouraging competition "both within and among the various modes of transportation." In order to introduce effective and sustainable intra-modal rail competition, it would appear essential that new carriers be allowed to enter and compete for

139. Id. at § 147(2).
140. Id. at § 147(5).
141. Id. at § 3(1).
traffic. New carriers, including companies specializing in aspects of the carriage business, such as container trains, should be encouraged to enter the industry. Similarly large shippers, such as those in the potash, hydro and coal industries, should be encouraged to enter private carriage by owning or leasing rolling stock and using the track owned by the railways.

Such competition in carriage could be encouraged by facilitating the extension of running rights but not just where "significant efficiency and cost savings occur."\textsuperscript{142} Similarly, operating authority and running rights should be readily granted by the new regulatory authority to new carriers, including private and for-hire carriers. As a result of such changes, the rail shipper would have some of the advantages enjoyed by those shipping by truck. The shipper would be able to provide its own freight cars and could even provide an entire train with cars and locomotives. Service by two railways would give the shipper alternatives, but each railway would still control service over its respective tracks.

Competition in rail carriage could be more substantially enhanced by separating the railway's ownership of the infrastructure from that of carriage.

Separation of track from carriage would make the rail mode similar to the operations in the highway, water and air transport sectors. The track company would own all tracks except tracks and yards owned by shippers and serving shipper-owned facilities. All carriers would be allowed to use the track, just as carriers share use of the fixed ways in other modes. The track company would control all train movements over its network, applying a common set of rules to all carriers. The company would assume the fixed track costs and would have the incentive to stimulate economies of traffic concentration and track coordination, converting track fixed costs into track tolls for the carrier. Joint use of the track would free most of the captive shippers by removing the rail carrier monopoly. The ensuing carrier competition would remove the vestiges of discrimination between commodities, shippers and regions, and instead the resulting rate structure would more accurately reflect the cost of service.

Underlying the transformation of an industry into two separate entities is the assumption that the two aspects of the railway can be operated so as to maintain it at an overall level of efficiency at least equal to the existing method of operation. Defenders of a method of operation founded in Victorian England suggest that a separation of track and carriage would lead to problems. Unclear signals, it is argued, would be sent concerning track construction and maintenance, and that there would be considera-

\textsuperscript{142} \textit{id.} at § 147(5).
ble cost in introducing train control systems. The numerous advocates of separation counter by suggesting that the techniques facilitating smooth operation are available, just as they are in the separated highway, air and water modes in which the agencies maintain the fixed way, provide traffic control, set operating rules, and license individuals to operate vehicles.

In providing traffic control for many users, the track company could employ methods used in managing the airways. Similarly, standardized licensing procedures could be employed for locomotive engineers, as is used for aviation licenses, while highway sign practices could serve as a guide for rail sign applications. Enforcement by track police could be considered. Maintenance would be executed by departments similar to the engineering and maintenance of way departments of existing railway companies. Toll changes would have to be sufficient to provide the necessary rate of return while reflecting the costs of individual roadway segments and types of train service. Examination of trackage right agreements in North America suggest they are made without any major operational or managerial problems, further suggesting that the railways engage in such contracts at their own convenience and oppose them in principle when they threaten to open up competition.

A number of organizational arrangements could be considered for the separated track operation. A privately-owned track could be considered, or alternatively, a track-owned and operated by a government agency. While a privately-owned track would be expected to operate efficiently, a government-owned track would allow retention of the symbol of the unifying "national spine." As more than two-thirds of the Canadian rail track network is already owned and operated by the government-owned Canadian National, public ownership of most of the rail track need not involve the nationalization of privately-owned track.

Having initiated increased carrier competition by extending running rights, it is recommended that a further step towards increasing carrier competition be undertaken by transforming CN from an integrated railway company into a government track company serving an increasingly diverse, multi-firm rail carriage industry.

CN's infrastructure in Canada would be transferred to the new crown corporation and would become essentially a commercial, privately-owned rail carrier. In order to most effectively fulfill this specialized role, CN would undertake to rationalize its holdings in activities unrelated to rail carriage.

The establishing statute would state the commercial goals of the new crown corporation and instruct the corporation to adjust its network to meet the changing market demands in order to earn adequate income, to remain economically viable and to attract and generate the required capital to meet future requirements. In adjusting its network, the crown track
corporation would have to be able to effectively expand and contract its track so as to compete effectively with other modes and other railways, particularly U.S. railways. There should be no exclusion, however, of other organizations entering as track builders and owners.

In transferring track to the new crown track corporation, consideration would have to be given to whether the uneconomical branch lines should be included, and if they were, how their costs should be covered. Direct subsidies from government authorities could be considered along with cross-subsidies generated within the crown track corporation. An alternative would be to consider encouraging institutional arrangements of ownership and operation of short lines that have proved successful in the United States. Two such institutional arrangements are ownership of the right-of-way and trackage by a municipality (or special district) or incorporation of the short lines as a cooperative of shippers. The owning entity would in turn lease the line to a private short-line operator. Government subsidies, if needed, could then be channeled into maintaining the right-of-way and track rather than subsidizing operating losses.

The increasing carrier competition can be seen in stages, the first being where new carriers, who will probably be large shippers, engage in private carriage over CN and CP's track networks. During this first stage it will be important for the new regulatory agency to facilitate access of new carriers on to both railway networks, and in order to protect CP's captive shippers, to encourage CP to grant running rights to other carriers. The second stage would be where the newly founded crown track corporation engages in contracting with the full range of carriers, including contract, private and common carriers. Many of the contract carriers can be expected to operate unit trains linking mines and power plants and transporting hazardous products. Private carriage will develop where it suits the shipper's needs and will probably attract a considerable amount of traffic currently moving in expensive truck operations.

Common carriage can be expected to approximate contract carriage, with the difference that the common carriers could provide it without a contract on an "as-needed" basis to any shipper. When used with a short train of a few cars, the common carrier in effect resembles an irregular route trucking company. Some common carriage could be financially unattractive to the carriers, such that during the transitional phase, there could be a sharp contraction in the supply, causing hardship to the affected shippers and communities. In order to ease such transitory adjustment, it is recommended that rather than requesting CN and CP to sustain common carriage out of cross-subsidies, that the effected shippers and communities negotiate for a specified period subsidies to sustain common carrier services. Finally there is the issue raised by CN's ownership of railways in the United States. The problem is that current
American regulation, in contrast to those proposed here, consolidates the exclusivity of carriage by the railways.

In the short run, it would appear prudent for CN's railways in the United States to operate as integrated operations. In order to further the trade in rail services, however, it is recommended that the Canadian government undertake bilateral discussions with officials in the United States for the purpose of considering regulatory changes that would permit the separation of track from carriage of American railroads, thereby permitting reciprocal rights for track and carrier companies in the two countries.
### Table I
Regulatory Support to and Constraints on Rail Cartelization

<table>
<thead>
<tr>
<th>Activity</th>
<th>Regulation</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interswitching</td>
<td>Order No. 4988</td>
<td>1908</td>
<td>Interswitching limit up to four miles from the point of the interchange. Rates established by the Commission.</td>
</tr>
<tr>
<td></td>
<td>Order 252</td>
<td>1918</td>
<td>Order provided for and compelled the service to be given.</td>
</tr>
<tr>
<td>Pooling</td>
<td>Railway Act</td>
<td>1906</td>
<td>Prohibition of physical and money pools.</td>
</tr>
<tr>
<td>Exchange of Information and</td>
<td>Canadian National-</td>
<td>1932</td>
<td>&quot;Agree. . .for purposes of effecting economies and providing for more remunerative operations&quot;.</td>
</tr>
<tr>
<td>Collective Pricing</td>
<td>Canadian Pacific Act</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S.C. 1932-33.C.33 16.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railway Act 279</td>
<td></td>
<td>1967</td>
<td>&quot;Railway companies shall exchange such information with respect to costs as may be required under this Act and may agree upon and charge common rates under and in accordance with regulations or orders made by the Commission.&quot;</td>
</tr>
<tr>
<td>Transport Act Part IV</td>
<td></td>
<td>1938</td>
<td>Railways authorized to make contracts of agreed charges with shippers. Board’s approval could not be given unless all railways joined in making the agreed charge.</td>
</tr>
<tr>
<td>Transport Act Section 32 (2)</td>
<td></td>
<td>1967</td>
<td>No agreement for an agreed charge for the transport by rail from or to a competitive point, or between competitive points, on the lines of two or more carriers by rail shall be made unless the competing carriers by rail consent thereto in writing or join in making it.</td>
</tr>
<tr>
<td>Section 32 (9)</td>
<td></td>
<td></td>
<td>Where an agreement for an agreed charge has been made between a carrier and a shipper, any other shipper may with the consent of the carrier become a party to the agreement.</td>
</tr>
<tr>
<td>Rates: Authorization</td>
<td>Railway Act S.325 (5)</td>
<td>1903</td>
<td>Board had power to &quot;fix, determine and enforce just and reasonable tolls&quot;.</td>
</tr>
<tr>
<td></td>
<td>S.325 (1)</td>
<td></td>
<td>Board had power to disallow the tariff, order a substitute tariff or prescribe other tolls.</td>
</tr>
<tr>
<td></td>
<td>Railway Act</td>
<td>1967</td>
<td>The Commission’s general power to disallow, suspend or prescribe tolls was written out of the Act.</td>
</tr>
<tr>
<td>Equality</td>
<td>Railway Act Rs.1927, C170 S.314</td>
<td>1903</td>
<td>Equality as to tolls and facilities.</td>
</tr>
<tr>
<td></td>
<td>Railway Act S.336</td>
<td></td>
<td>The national freight rates policy was to subject the railways to charge, in respect of all freight traffic of the same description, tolls to all persons at the same rate.</td>
</tr>
<tr>
<td>National Transportation Act S.3(a)</td>
<td></td>
<td>1967</td>
<td>The National Transport policy was enacted in place of the concept of equality of tolls, premised on &quot;the ability of any mode of transport to compete freely with any other mode of transport&quot;.</td>
</tr>
<tr>
<td>Activity</td>
<td>Regulation</td>
<td>Date</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Filing</td>
<td>Railway Act S.330, 331</td>
<td>1903</td>
<td>Standard freight tariffs were to be filed with and subject to the approval of the Board. Once approved, they were required to be published 'in at least two consecutive weekly issues of the Canada Gazette'. Special freight tariffs had a statutory notice period of 30 days.</td>
</tr>
<tr>
<td>Rebates and Confidential Contracts</td>
<td>Railway Act 401</td>
<td>1906</td>
<td>Prohibition of rebates and confidential contracts.</td>
</tr>
<tr>
<td>Maximum and Minimum Rates</td>
<td>Railway Act S.276, S.277, 278</td>
<td>1967</td>
<td>'All freight rates shall be compensatory' Commission given jurisdiction to disallow non-compensatory rates. The upper limit established by the captive shipper provision: such a shipper could apply to the Commission to have the probable range of a fixed rate established.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Commission may investigate where a case has been made concerning an Act, omission or rate that has prejudicially affected the public interest.</td>
</tr>
</tbody>
</table>
Table II
Regulatory Rates Applied to Rail Traffic

<table>
<thead>
<tr>
<th>Date</th>
<th>Statute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1897</td>
<td>Crows' Nest Pass Act and Agreement, between (Canadian Pacific Railway and the Government of Canada)</td>
<td>In exchange for a subsidy to build a rail line from Lethbridge, Alberta through the Crow Nest Pass to Nelson, B.C., the railway agreed to reduce eastbound rates on grain and flour to the head of navigation (the Lakehead) and westbound rates on the &quot;settlement effects&quot;.</td>
</tr>
<tr>
<td>1901</td>
<td>Manitoba Agreement</td>
<td>In return for financial and other assistance from the Manitoba government, the Canadian Northern railway built a line from Winnipeg to Thunder Bay. The Agreement provided for the reduction in grain rates below that provided under the Crows' Nest and a 15 per cent reduction on westward commodities.</td>
</tr>
<tr>
<td>1955</td>
<td></td>
<td>The Manitoba Agreement ended with the introduction of the equalized class rate scale in 1955.</td>
</tr>
<tr>
<td>1925</td>
<td>Railway Act Amendment</td>
<td>Special rates for settlers’ effects ended, but the Railway Act incorporated the principal elements of the CNP Act including a continuation of the special rates for eastbound grain and flour on all present and future railways and an expansion of the number of shipping points from which the rates applied.</td>
</tr>
<tr>
<td>1927-61</td>
<td></td>
<td>The Crow rate extended to: grain and flour shipped to the west coast (1927); milling, distilling and brewing industries, as well as certain feed grain products (1927-45); grain shipped to Churchill, Manitoba (1931). By the 1980’s 50 commodities moved at the statutory rate.</td>
</tr>
<tr>
<td>1983</td>
<td>Western Grain Transportation Act</td>
<td>The Crow Benefit (the gross railway revenue shortfall), defined as the additional revenue the railways would need in order to cover variable costs of operation as well as an (arbitrary) contribution to overhead costs estimated at $651.6 on a base year crop of 31.1 million tonnes. Under the Act the government agreed to:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Pay the entire crow benefit, beginning with the 1983-84 crop year, to the railways.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. A distance-related base rate scale established for the movement of grain by rail. The annual rate scale will be the base rate adjusted for railway price indices established by the CTC.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Shippers responsible for the first three percentage points of any increase in annual railway costs until 1985-86, when their share rises to the first six points, with the government in each instance making up the remainder.</td>
</tr>
<tr>
<td>1927</td>
<td>Maritime Freight Rates Act</td>
<td>Reduction of 20 per cent in tolls within the maritime Provinces. The 20 per cent was the measure of any disability resulting from &quot;national, imperial and strategic considerations,&quot; and this differential was to be applied to rates within the &quot;selected territory&quot; and to the portion of rates applicable within the select territory on traffic proceeding out of the select territory.</td>
</tr>
<tr>
<td>1957</td>
<td></td>
<td>The benefit on westbound interterritorial traffic was increased to 30 per cent on the portion of the haul within the selected territory.</td>
</tr>
<tr>
<td>Date</td>
<td>Statute</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1969</td>
<td>The Atlantic Region Freight Assistance Act</td>
<td>Empowered the Governor in Council to &quot;vary or remove the reduction in tariffs for the preferred movement of traffic wholly within the selected territory&quot;. In 1974, subsidies increased to 50 percent on selected westbound commodities.</td>
</tr>
<tr>
<td>1951</td>
<td>Railway Act Amendment &quot;The Bridge Subsidy&quot;</td>
<td>Subsidy paid on traffic moving at other than competitive or agreed rates between Sudbury and Thunder Bay, Ontario. Under the provision of the subsidy, rates on traffic passing over the Bridge Territory were to be reduced by the amount of a grant ($7 million) paid to the railways to compensate them for the costs of maintenance of the allegedly unproductive sections of their transcontinental routes.</td>
</tr>
<tr>
<td>1967</td>
<td>Freight Rate Reduction Act</td>
<td>The bridge subsidy was abolished. Freight rates were &quot;rolled back&quot; and in return the railways were compensated. Between 1959 and 1967, over $500 million paid by the government to cover the shortfall in revenue due to the rate freeze.</td>
</tr>
<tr>
<td>1967</td>
<td>Railway Act Section 272 &quot;At-and-East&quot; Rates</td>
<td>Rates applied to export grain and flour transported by ship from the Lakehead to Georgia Bay ports and from there by train to Montreal, Halifax and other east coast ports. Prior to 1967 the Board set these rates to stop diversion of traffic through Buffalo. In 1967, the rates were frozen by a federal statute at the 1960 level. The difference between the compensatory freight rate, as determined by the CTC and the actual rate frozen at the 1960 level is covered by a federal subsidy.</td>
</tr>
</tbody>
</table>
Table III
Passenger Trains: Abandonment and Subsidies, 1968-77

<table>
<thead>
<tr>
<th>Year</th>
<th>Abandonment decisions</th>
<th>Subsidies(^1)</th>
<th>Ratio of subsides to passenger revenue(^2)</th>
<th>Passenger Train miles (1968 = 100)</th>
<th>Subsidies(^3) per passenger train mile</th>
<th>Passenger revenue per passenger mile</th>
<th>Subsidies(^4) per passenger mile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Issued</td>
<td>Permitted</td>
<td>CN ($ Million)</td>
<td>CP (Cents)</td>
<td>CN (Cents)</td>
<td>CP (Cents)</td>
<td>CN (Cents)</td>
</tr>
<tr>
<td>1977</td>
<td>7</td>
<td>8</td>
<td>201.572</td>
<td>48.301</td>
<td>1.65</td>
<td>2.11</td>
<td>58</td>
</tr>
<tr>
<td>1976</td>
<td>2</td>
<td>1</td>
<td>191.353</td>
<td>44.835</td>
<td>1.37</td>
<td>1.96</td>
<td>59</td>
</tr>
<tr>
<td>1975</td>
<td>2</td>
<td>2</td>
<td>163.989</td>
<td>39.432</td>
<td>1.29</td>
<td>1.75</td>
<td>45</td>
</tr>
<tr>
<td>1974</td>
<td>1</td>
<td>1</td>
<td>130.384</td>
<td>31.468</td>
<td>1.12</td>
<td>1.37</td>
<td>59</td>
</tr>
<tr>
<td>1973</td>
<td>9</td>
<td>—</td>
<td>112.316</td>
<td>27.214</td>
<td>1.33</td>
<td>1.79</td>
<td>52</td>
</tr>
<tr>
<td>1972</td>
<td>41</td>
<td>—</td>
<td>95.398</td>
<td>86.479</td>
<td>0.92</td>
<td>1.01</td>
<td>56</td>
</tr>
<tr>
<td>1971</td>
<td>10</td>
<td>4</td>
<td>60.542</td>
<td>24.926</td>
<td>0.62</td>
<td>0.93</td>
<td>60</td>
</tr>
<tr>
<td>1970</td>
<td>9</td>
<td>6</td>
<td>—</td>
<td>26.332</td>
<td>—</td>
<td>0.97</td>
<td>70</td>
</tr>
<tr>
<td>1969</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>76</td>
</tr>
<tr>
<td>1968</td>
<td>1</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>100</td>
<td>100</td>
<td>—</td>
</tr>
</tbody>
</table>

1 Subsidies are those issued under Section 261 of the Railway Act plus the 20 per cent borne by the railway carriers.
2 Subsidies refer to those issued under Section 261 of the Railway Act; passenger revenue includes passenger revenue, baggage, sleeping and parlour car revenue, mail and express revenue.
3 Subsidies refer to those issued under Section 261 of the Railway Act.
4 Passenger revenue refer only to passenger revenue, and excludes the items of baggage, sleeping and parlour car revenue, mail and express revenue.
5 Subsidies are those issued under Section 261 of the Railway Act plus the 20 per cent borne by the railway carriers.

<table>
<thead>
<tr>
<th>Year</th>
<th>Section 261</th>
<th>Section 258</th>
<th>Section 256</th>
<th>Section 413</th>
<th>Section 272</th>
<th>Totals 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Passenger train deficits</td>
<td>Guaranteed branch lines</td>
<td>Unprotected branch lines</td>
<td>“Normal” payments</td>
<td>Eastern rates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN</td>
<td>CP</td>
<td>Total</td>
<td>CN</td>
<td>CP</td>
<td>Total</td>
</tr>
<tr>
<td>1967</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>62,427</td>
<td>43,534</td>
<td>105,961</td>
</tr>
<tr>
<td>1968</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>54,967</td>
<td>38,261</td>
<td>93,228</td>
</tr>
<tr>
<td>1969</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>46,591</td>
<td>32,404</td>
<td>79,995</td>
</tr>
<tr>
<td>1970</td>
<td>21,944</td>
<td>21,944</td>
<td>21,944</td>
<td>12,592</td>
<td>12,592</td>
<td>12,592</td>
</tr>
<tr>
<td>1971</td>
<td>50,452</td>
<td>20,772</td>
<td>71,224</td>
<td>18,621</td>
<td>15,068</td>
<td>33,689</td>
</tr>
<tr>
<td>1973</td>
<td>93,597</td>
<td>22,679</td>
<td>116,276</td>
<td>27,165</td>
<td>18,686</td>
<td>45,851</td>
</tr>
<tr>
<td>1974</td>
<td>108,654</td>
<td>26,224</td>
<td>134,878</td>
<td>49,738</td>
<td>31,545</td>
<td>81,283</td>
</tr>
<tr>
<td>1975</td>
<td>136,658</td>
<td>32,860</td>
<td>169,518</td>
<td>51,547</td>
<td>43,573</td>
<td>95,120</td>
</tr>
<tr>
<td>1976</td>
<td>159,353</td>
<td>37,363</td>
<td>196,716</td>
<td>55,823</td>
<td>45,501</td>
<td>101,324</td>
</tr>
<tr>
<td>1977</td>
<td>167,572</td>
<td>40,251</td>
<td>207,823</td>
<td>46,432</td>
<td>56,133</td>
<td>102,545</td>
</tr>
<tr>
<td>1978</td>
<td>176,250</td>
<td>37,359</td>
<td>213,609</td>
<td>63,419</td>
<td>59,498</td>
<td>122,917</td>
</tr>
<tr>
<td>1979</td>
<td>348,374</td>
<td>4,893</td>
<td>353,267</td>
<td>65,625</td>
<td>76,519</td>
<td>141,784</td>
</tr>
<tr>
<td>1980</td>
<td>2,005</td>
<td>0.196</td>
<td>2,199</td>
<td>96,867</td>
<td>99,067</td>
<td>199,934</td>
</tr>
</tbody>
</table>

1 The figures in the total column are the summation of the payments to the dollar, while the figures in the section columns are to the nearest one thousand dollars.
Source: Rail Economic Analysis Branch, CTC.
Table V
Rates of Return for CN and CP: 1967-1980

<table>
<thead>
<tr>
<th>Year</th>
<th>Earnings(^1) ((\text{$ current}))</th>
<th>Capital(^2) ((\text{$ current}))</th>
<th>Rates of return (Per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CN</td>
<td>CP</td>
<td>CN</td>
</tr>
<tr>
<td>1967</td>
<td>140,526</td>
<td>149,940</td>
<td>4,177,878</td>
</tr>
<tr>
<td>1968</td>
<td>131,944</td>
<td>188,115</td>
<td>4,271,584</td>
</tr>
<tr>
<td>1969</td>
<td>178,287</td>
<td>145,946</td>
<td>4,424,292</td>
</tr>
<tr>
<td>1970</td>
<td>191,450</td>
<td>157,622</td>
<td>4,493,113</td>
</tr>
<tr>
<td>1971</td>
<td>191,635</td>
<td>165,497</td>
<td>4,595,199</td>
</tr>
<tr>
<td>1972</td>
<td>212,600</td>
<td>186,205</td>
<td>4,542,050</td>
</tr>
<tr>
<td>1973</td>
<td>209,273</td>
<td>196,365</td>
<td>4,663,713</td>
</tr>
<tr>
<td>1974</td>
<td>227,628</td>
<td>221,382</td>
<td>4,863,549</td>
</tr>
<tr>
<td>1975</td>
<td>43,445</td>
<td>224,023</td>
<td>5,176,805</td>
</tr>
<tr>
<td>1976</td>
<td>317,928</td>
<td>274,653</td>
<td>5,443,816</td>
</tr>
<tr>
<td>1977</td>
<td>383,217</td>
<td>293,405</td>
<td>5,760,324</td>
</tr>
<tr>
<td>1978</td>
<td>389,993</td>
<td>319,125</td>
<td>5,903,157</td>
</tr>
<tr>
<td>1979</td>
<td>520,951</td>
<td>391,889</td>
<td>6,240,229</td>
</tr>
<tr>
<td>1980</td>
<td>521,229</td>
<td>445,650</td>
<td>6,597,436</td>
</tr>
</tbody>
</table>

1 Earnings consist of:
   Net railway operating income.
   Income taxes.
   + Income from lease of road and equipment minus rent paid for leased road and equipment.
   + Road property, equipment and other equipment and machinery depreciation.

2 Capital consists of:
   + Current assets minus current liabilities.
   + Total road and equipment property.
   + Improvements on leased property.

Table VI
Average Transport Charges in Goods Producing Industries 1981

<table>
<thead>
<tr>
<th>INDUSTRY GROUP</th>
<th>DOMESTIC SALES</th>
<th></th>
<th>EXPORTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transport charges from</td>
<td>All transport modes¹</td>
<td>Rail</td>
<td>All transport modes¹</td>
</tr>
<tr>
<td></td>
<td>producers to purchasers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(delivery transport cost) as a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>percentage of output valued in producers prices⁴</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All modes³</td>
<td>Rail</td>
<td>All modes³</td>
<td>Rail</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.1</td>
<td>0.6</td>
<td>6.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Forestry</td>
<td>4.5</td>
<td>1.1</td>
<td>7.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Fishing, Hunting, Trapping</td>
<td>2.3</td>
<td>1.9</td>
<td>3.0</td>
<td>0.2</td>
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<tr>
<td>Gold Mines</td>
<td>1.4</td>
<td>2.3</td>
<td>3.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Uranium Mines</td>
<td>0.7</td>
<td>0.08</td>
<td>1.2</td>
<td>0.1</td>
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<tr>
<td>Iron Mines</td>
<td>10.8</td>
<td>5.3</td>
<td>12.8</td>
<td>6.4</td>
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<tr>
<td>Base Metal &amp; Other Metal Mines</td>
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<td>5.8</td>
<td>3.6</td>
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<td>Coal Mines</td>
<td>9.8</td>
<td>7.0</td>
<td>53.0</td>
<td>35.1</td>
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<td>Petroleum and Gas Wells</td>
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<td>1.2</td>
<td>3.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Asbestos Mines</td>
<td>10.3</td>
<td>2.4</td>
<td>9.0</td>
<td>1.5</td>
</tr>
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<td>Gypsum Mines</td>
<td>51.1</td>
<td>31.8</td>
<td>39.3</td>
<td>24.5</td>
</tr>
<tr>
<td>Salt Mines</td>
<td>36.6</td>
<td>11.6</td>
<td>17.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Other Non-metal Mines</td>
<td>18.1</td>
<td>8.1</td>
<td>20.7</td>
<td>12.2</td>
</tr>
<tr>
<td>Quarries &amp; Sand Pits</td>
<td>26.4</td>
<td>7.3</td>
<td>23.7</td>
<td>7.2</td>
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<tr>
<td>Manufacturing industries²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish Products Industry</td>
<td>3.9</td>
<td>0.5</td>
<td>1.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Fruit and Vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processing</td>
<td>4.1</td>
<td>1.8</td>
<td>3.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Flour and Breakfast Cereals</td>
<td>4.3</td>
<td>2.2</td>
<td>3.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Distilleries</td>
<td>3.9</td>
<td>0.4</td>
<td>6.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Fiber Preparing Mills</td>
<td>4.0</td>
<td>0.3</td>
<td>10.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Cordage and Twine</td>
<td>6.2</td>
<td>0.7</td>
<td>6.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Sawmills</td>
<td>10.9</td>
<td>5.8</td>
<td>11.5</td>
<td>4.1</td>
</tr>
<tr>
<td>Veneer and Plywood</td>
<td>7.6</td>
<td>4.4</td>
<td>5.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Wooden Box</td>
<td>4.5</td>
<td>0.3</td>
<td>7.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Misc. Wood Industry</td>
<td>6.3</td>
<td>1.2</td>
<td>7.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Pulp and Paper</td>
<td>5.2</td>
<td>1.9</td>
<td>5.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Asphalt and Related Products</td>
<td>5.0</td>
<td>1.9</td>
<td>4.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Aluminium Smelting and Ref.</td>
<td>5.2</td>
<td>1.4</td>
<td>2.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Aluminium Rolling and Extruding</td>
<td>1.8</td>
<td>0.5</td>
<td>6.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Cement</td>
<td>11.8</td>
<td>5.4</td>
<td>16.2</td>
<td>7.4</td>
</tr>
<tr>
<td>Lime</td>
<td>14.7</td>
<td>4.3</td>
<td>16.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Concrete</td>
<td>9.6</td>
<td>1.2</td>
<td>5.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Clay Products</td>
<td>6.2</td>
<td>2.4</td>
<td>3.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Stone Products</td>
<td>7.3</td>
<td>3.7</td>
<td>8.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Other Non-metalic Products</td>
<td>9.1</td>
<td>0.9</td>
<td>7.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Other Petrol and Coal Products</td>
<td>10.1</td>
<td>3.5</td>
<td>8.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Mixed Fertilizers</td>
<td>8.4</td>
<td>5.1</td>
<td>21.1</td>
<td>12.7</td>
</tr>
<tr>
<td>Average of Total³</td>
<td>3.5</td>
<td>1.1</td>
<td>4.1</td>
<td>1.4</td>
</tr>
</tbody>
</table>

1 Private trucking is not included.
2 Only manufacturing industries with a substantial transport input have been displayed.
3 The average is for all 165 of the 'M' level industries rather than the smaller number included in the table.
4 Producers' prices cover the producers' costs of production.

Source: Statistics Canada. Input-output models.
### Table VII
Use of Railway Track and Rolling Stock by CN and CP

<table>
<thead>
<tr>
<th>Year</th>
<th>Output: revenue ton miles CN &amp; CP</th>
<th>Revenue freight tons per miles of track operated</th>
<th>Freight and passenger train miles per track mileage</th>
<th>Average freight car capacity</th>
<th>Revenue ton miles per freight car</th>
<th>Load factor: average car load (ton miles per car)</th>
<th>Utilization of revenue freight car capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'000</td>
<td>(millions)</td>
<td>Ratio of CN to CP</td>
<td>Ratio of CN &amp; CP</td>
<td>Ratio of CN to CP</td>
<td>Ratio of CN &amp; CP</td>
<td>Ratio of CN &amp; CP</td>
</tr>
<tr>
<td>1980</td>
<td>139,342</td>
<td>37,826</td>
<td>1.38</td>
<td>3.64</td>
<td>1.41</td>
<td>0.97</td>
<td>0.98</td>
</tr>
<tr>
<td>1979</td>
<td>137,609</td>
<td>39,050</td>
<td>1.33</td>
<td>3.76</td>
<td>1.39</td>
<td>0.88</td>
<td>0.88</td>
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<tr>
<td>1978</td>
<td>131,236</td>
<td>41,114</td>
<td>1.34</td>
<td>3.80</td>
<td>1.58</td>
<td>1.09</td>
<td>1.09</td>
</tr>
<tr>
<td>1977</td>
<td>124,605</td>
<td>41,114</td>
<td>1.34</td>
<td>3.80</td>
<td>1.58</td>
<td>1.09</td>
<td>1.09</td>
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<tr>
<td>1976</td>
<td>118,790</td>
<td>41,373</td>
<td>1.37</td>
<td>3.90</td>
<td>1.58</td>
<td>1.10</td>
<td>1.10</td>
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<td>1975</td>
<td>117,512</td>
<td>41,495</td>
<td>1.29</td>
<td>4.00</td>
<td>1.58</td>
<td>1.10</td>
<td>1.10</td>
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<tr>
<td>1974</td>
<td>120,282</td>
<td>41,713</td>
<td>1.28</td>
<td>4.05</td>
<td>1.58</td>
<td>1.12</td>
<td>1.12</td>
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<td>1973</td>
<td>112,527</td>
<td>41,743</td>
<td>1.28</td>
<td>4.06</td>
<td>1.58</td>
<td>1.12</td>
<td>1.12</td>
</tr>
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<td>1972</td>
<td>110,957</td>
<td>41,752</td>
<td>1.25</td>
<td>4.07</td>
<td>1.58</td>
<td>1.13</td>
<td>1.13</td>
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<tr>
<td>1971</td>
<td>102,867</td>
<td>41,878</td>
<td>1.25</td>
<td>4.08</td>
<td>1.58</td>
<td>1.13</td>
<td>1.13</td>
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<td>1970</td>
<td>93,952</td>
<td>41,815</td>
<td>1.23</td>
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<td>1.16</td>
<td>1.16</td>
</tr>
<tr>
<td>1969</td>
<td>83,640</td>
<td>41,231</td>
<td>1.31</td>
<td>4.06</td>
<td>1.58</td>
<td>1.12</td>
<td>1.12</td>
</tr>
<tr>
<td>1968</td>
<td>80,014</td>
<td>41,152</td>
<td>1.21</td>
<td>4.02</td>
<td>1.58</td>
<td>1.16</td>
<td>1.16</td>
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<tr>
<td></td>
<td><strong>Annual averages</strong></td>
<td></td>
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</tr>
<tr>
<td>1958-67</td>
<td>67,028</td>
<td>41,592</td>
<td>1.22</td>
<td>4.01</td>
<td>1.58</td>
<td>1.13</td>
<td>1.13</td>
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<tr>
<td>1950-58</td>
<td>62,113</td>
<td>41,582</td>
<td>1.22</td>
<td>4.01</td>
<td>1.58</td>
<td>1.13</td>
<td>1.13</td>
</tr>
<tr>
<td>1945-50</td>
<td>52,330</td>
<td>40,867</td>
<td>1.13</td>
<td>4.01</td>
<td>1.58</td>
<td>1.33</td>
<td>1.33</td>
</tr>
</tbody>
</table>

1 From 1979 onwards passenger train miles were produced by VIA Rail.
2 The load factor is measured by taking the average car load and dividing by the average freight car capacity. Note that while the latter is for CN and CP, the numerator is a measure of all C railways.

Source: Canadian National Railways, 1923-71, S.D. Catalogue No. 52-201; Canadian Pacific Ltd., 1923-71, S.D. Catalogue No. 52-202; Canadian National Railways and Canadian Pacific Ltd., 1971-75, S.D. Catalogue No. 52-213; Railway Transport. Part III, Equipment, track and fuel statistics, Catalogue No. 52-209; Railway Transport. Part I, Comparative Summary, S.C. Catalogue No. 52
Table VIII  
Employment and Compensation in CN and CP

<table>
<thead>
<tr>
<th>Year</th>
<th>Average haul ratio CN/CP</th>
<th>Percentage of total expenses</th>
<th>Labor Compensation</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freight</td>
<td>Passenger</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>1980</td>
<td>1.02</td>
<td>0.75</td>
<td>59.4</td>
<td>1.21</td>
</tr>
<tr>
<td>1979</td>
<td>1.00</td>
<td>4.23</td>
<td>63.2</td>
<td>1.20</td>
</tr>
<tr>
<td>1978</td>
<td>0.96</td>
<td>1.97</td>
<td>63.6</td>
<td>1.16</td>
</tr>
<tr>
<td>1977</td>
<td>0.99</td>
<td>2.14</td>
<td>66.2</td>
<td>1.18</td>
</tr>
<tr>
<td>1976</td>
<td>1.01</td>
<td>2.53</td>
<td>66.8</td>
<td>1.20</td>
</tr>
<tr>
<td>1975</td>
<td>1.07</td>
<td>2.11</td>
<td>67.2</td>
<td>1.20</td>
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<tr>
<td>1974</td>
<td>0.99</td>
<td>1.59</td>
<td>70.3</td>
<td>1.25</td>
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<tr>
<td>1973</td>
<td>0.93</td>
<td>2.09</td>
<td>70.4</td>
<td>1.25</td>
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<tr>
<td>1972</td>
<td>0.94</td>
<td>1.92</td>
<td>72.1</td>
<td>1.25</td>
</tr>
<tr>
<td>1971</td>
<td>0.95</td>
<td>1.73</td>
<td>73.1</td>
<td>1.20</td>
</tr>
<tr>
<td>1970</td>
<td>0.94</td>
<td>1.60</td>
<td>74.0</td>
<td>1.20</td>
</tr>
<tr>
<td>1969</td>
<td>0.92</td>
<td>1.39</td>
<td>72.0</td>
<td>1.19</td>
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<td>1968</td>
<td>0.94</td>
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<td>71.8</td>
<td>1.19</td>
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<tr>
<td>1967</td>
<td>0.96</td>
<td>1.33</td>
<td>64.0</td>
<td>1.20</td>
</tr>
</tbody>
</table>

1 Revenue freight ton miles and revenue passenger ton miles.  
2 Total compensation as percentage of total expenses.  
3 Average salaries and wages per hour as a ratio of all manufacturing wages and salaries per hour. The figures for the railways excludes other operations, including express, highway transport, telecommunications and outside operations.  
4 Employment for the period 1960-66 taken as the base, equal to 100.  

Sources:  
Canadian Pacific Limited, Statistics Canada, Catalogue No. 52-202 Annual.  
Canadian National Railways, Statistics Canada, Catalogue No. 52-201 Annual.  
Canadian Statistical Review No. 11-003.
### Table IX
Indicators of Average Labor Productivity

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio aggregate output to total labour (1960-67 = 100)</th>
<th>Aggregate output to total labour</th>
<th>Equipment maintenance</th>
<th>Road maintenance</th>
<th>General</th>
<th>Direct rail passenger transport</th>
<th>Road freight crews</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CN</td>
<td>CP</td>
<td>CN &amp; CP</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>1980</td>
<td>2.13</td>
<td>3.38</td>
<td>2.50</td>
<td>0.76</td>
<td>0.87</td>
<td>0.72</td>
<td>0.89</td>
</tr>
<tr>
<td>1979</td>
<td>1.98</td>
<td>3.18</td>
<td>2.35</td>
<td>0.76</td>
<td>0.87</td>
<td>0.74</td>
<td>0.85</td>
</tr>
<tr>
<td>1978</td>
<td>1.86</td>
<td>3.04</td>
<td>2.22</td>
<td>0.75</td>
<td>0.92</td>
<td>0.74</td>
<td>0.76</td>
</tr>
<tr>
<td>1977</td>
<td>1.73</td>
<td>2.86</td>
<td>2.08</td>
<td>0.74</td>
<td>0.98</td>
<td>0.74</td>
<td>0.73</td>
</tr>
<tr>
<td>1976</td>
<td>1.67</td>
<td>2.72</td>
<td>2.00</td>
<td>0.74</td>
<td>0.98</td>
<td>0.73</td>
<td>0.73</td>
</tr>
<tr>
<td>1975</td>
<td>1.50</td>
<td>2.60</td>
<td>1.84</td>
<td>0.70</td>
<td>0.90</td>
<td>0.70</td>
<td>0.67</td>
</tr>
<tr>
<td>1974</td>
<td>1.52</td>
<td>2.50</td>
<td>1.84</td>
<td>0.74</td>
<td>0.57</td>
<td>0.71</td>
<td>0.67</td>
</tr>
<tr>
<td>1973</td>
<td>1.50</td>
<td>2.50</td>
<td>1.82</td>
<td>0.74</td>
<td>0.59</td>
<td>0.76</td>
<td>0.61</td>
</tr>
<tr>
<td>1972</td>
<td>1.52</td>
<td>2.22</td>
<td>1.75</td>
<td>0.74</td>
<td>0.65</td>
<td>0.78</td>
<td>0.67</td>
</tr>
<tr>
<td>1971</td>
<td>1.36</td>
<td>2.00</td>
<td>1.57</td>
<td>0.74</td>
<td>0.69</td>
<td>0.78</td>
<td>0.66</td>
</tr>
<tr>
<td>1970</td>
<td>1.24</td>
<td>1.80</td>
<td>1.42</td>
<td>0.74</td>
<td>0.75</td>
<td>0.76</td>
<td>0.75</td>
</tr>
<tr>
<td>1969</td>
<td>1.13</td>
<td>1.50</td>
<td>1.24</td>
<td>0.74</td>
<td>0.65</td>
<td>0.76</td>
<td>0.80</td>
</tr>
<tr>
<td>1968</td>
<td>1.06</td>
<td>1.42</td>
<td>1.17</td>
<td>0.74</td>
<td>0.87</td>
<td>0.76</td>
<td>0.85</td>
</tr>
<tr>
<td>1967</td>
<td>0.96</td>
<td>1.32</td>
<td>1.08</td>
<td>0.74</td>
<td>0.84</td>
<td>0.76</td>
<td>0.84</td>
</tr>
</tbody>
</table>

1. Output is the unweighted sum of revenue ton miles and revenue passenger miles, and labor refers to total labor employed by the railways, excluding express, highway transport, telecommunications and outside operations. The base period is 1960-67, and subsequent years are expressed as a ratio of this base period.
2. Taken from column one and two.
3. Equipment Maintenance includes categories 27 to 41 in Statistics Canada, Catalogue No. 52-212. Output is measured by the unweighted aggregate of revenue ton miles and revenue passenger miles.
4. Road maintenance includes categories 11 to 26 in Statistics Canada, Catalogue No. 52-212. Output is measured by total miles of track operated.
5. General refers approximately to those employed in administration, covering categories 1 to 10 in Statistics Canada, Catalogue No. 52-212. Output is measured as the unweighted sum of revenue ton miles and revenue passenger miles.
6. Direct rail passenger transport includes those directly employed in producing passenger services. Output is measured as revenue passenger miles. Categories included in producing such services are: road passenger conductors, brakemen and baggagemen, engineers and motormen, sleeping and parlour car personnel, dining car personnel and coach cleaners, baggage, parcel room and station attendants, restaurant personnel, news agents, motor vehicle, sleeping and parlour car personnel, dining car personnel and coach cleaners, baggage, parcel room and station attendants, restaurant personnel, news agents, motor vehicle mechanics and helpers and revenue motor vehicle drivers.
7. The output of road freight crews is measured by revenue ton miles and those employed include: conductors, brakemen, engineers, firemen and helpers.

Table X
Comparisons of Estimates of Average Annual Percentage Change in Total Factor Productivity of CN and CP

<table>
<thead>
<tr>
<th>Study</th>
<th>Study Period</th>
<th>Average Annual Changes in Productivity</th>
<th></th>
<th></th>
<th></th>
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<tr>
<td></td>
<td></td>
<td>CN</td>
<td>CP</td>
<td>CN &amp; CP</td>
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</tr>
<tr>
<td>1. Caves and Christensen¹</td>
<td>1956-75</td>
<td>3.1</td>
<td>2.7</td>
<td></td>
<td></td>
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<tr>
<td>2. Roy and Cofsky</td>
<td>1956-75</td>
<td>3.8</td>
<td>3.9</td>
<td></td>
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<tr>
<td></td>
<td>1956-81</td>
<td>1.2</td>
<td>0.2</td>
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<td></td>
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<tr>
<td></td>
<td>1970-81²</td>
<td>2.9</td>
<td>2.9</td>
<td></td>
<td></td>
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<tr>
<td>3. Caves and Christensen³</td>
<td>1956-63</td>
<td>1.8</td>
<td>1.7</td>
<td>1.7</td>
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<tr>
<td></td>
<td>1963-74</td>
<td>4.3</td>
<td>3.3</td>
<td>4.0</td>
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<tr>
<td></td>
<td>1956-74</td>
<td>3.3</td>
<td>2.7</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>4. Caves, Christensen, Swanson and Tretheway</td>
<td>1956-79</td>
<td>3.0</td>
<td>2.2</td>
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<td></td>
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<tr>
<td>5. Freeman, Oum, Tretheway and Waters</td>
<td>1956-81</td>
<td>3.1</td>
<td>3.5</td>
<td>2.5⁴</td>
<td></td>
</tr>
</tbody>
</table>

1 These estimates are derived from the use of unweighted ton miles.
3 Estimates of a specification using four output indexes, including weighted passenger miles and ton mile indicies.
4 The average annual growth rate of total factor productivity for both railways was calculated after controlling for the effects of changes in outputs and route miles.

Sources
<table>
<thead>
<tr>
<th>Activity</th>
<th>Regulation</th>
<th>Proposed Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange of Information and Collective Pricing</td>
<td>Railway Act</td>
<td>Elimination of the collective rate making provision through the sharing of information and the setting of common tariffs</td>
</tr>
<tr>
<td></td>
<td>Section 279</td>
<td>Clause 339 repeals Section 279.</td>
</tr>
<tr>
<td></td>
<td>Transport Act</td>
<td>Removal of agreed changes</td>
</tr>
<tr>
<td>Rates:</td>
<td>Section 32(2)</td>
<td>Sections 120-128 retain the provisions concerning agreed changes.</td>
</tr>
<tr>
<td>Rebates and Confidential Contracts</td>
<td>Railway Act</td>
<td>Removal of the prohibition on rebates and confidential contracts.</td>
</tr>
<tr>
<td></td>
<td>401</td>
<td>Confidential contracts to be allowed on all domestic, overseas, import/export and transborder traffic, exclusive of grain traffic governed by specific legislation. No appeals to be allowed from confidential rate contracts. Rebates to be permitted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section 120(1). A Railway company may enter into a contract with a shipper that the parties agree to keep confidential respecting. (c) Rebates from rates set out in tariffs or confidential contracts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section 60 (Public Interest). The Agency, when conducting an investigation, shall have regard to the following factors: (d) Whether an existing confidential contract with another shipper for transportation of substantially similar product creates an unfair advantage by providing a lower freight rate or better shipping conditions that cannot be justified by any cost or efficiency difference for shipments under substantially similar conditions.</td>
</tr>
<tr>
<td>Filing</td>
<td>Railway Act</td>
<td>All confidential contracts and shipments that qualify for subsidies under statutory rates will be filed. All other published tariffs will be retained for public scrutiny in the offices of the railways concerned.</td>
</tr>
<tr>
<td></td>
<td>S.330, 331</td>
<td>Sections 120(2) and (3). Specify the filing of the contract with the Agency and the publication of the summary information in the contract.</td>
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Table XI (cont'd)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Regulation</th>
<th>Proposed Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum and Minimum Rates</td>
<td>Railway Act Section 278, 279</td>
<td>The provision that all freight rates shall be compensatory will be subject to a sunset provision, under which it will be repealed in 5 years. Repeal of the captive shipper provision. Instead, there will be a series of appeal provisions encompassing mediation and final offer arbitration. Clause 339 repeals Section 278, which provided for the fixing of maximum rates for the shipper. Section 59(2)(b) (Public Interest). Eliminates the requirement that a prime facie case be established before the Agency may grant leave to appeal and proceed to investigate the action which is the subject of investigation. Section 62(1). In conducting an investigation under Section 59, the Agency may either hold public hearings or decide the matter on the basis of documents filed with the Agency. Section 112 (2) Every rate shall be compensatory. (3) A rate shall be deemed to be compensatory when it exceeds the variable cost of the movement of the traffic concerned as determined by the Agency. Section 134(2). . . where a shipper has access to the lines of only one railway company at the point of origin or of destination of the movement of the traffic of the shipper . . . the local carrier . . . shall on the request of the shipper establish a competitive line rate applicable to the movement of the traffic . . . to or from the nearest interchange with a connecting carrier. Section 136. On the application of a shipper, the Agency shall, within 45 days of the receipt of the application, establish . . .; (a) the amount of the competitive line rate.</td>
</tr>
<tr>
<td>Joint Line Rates</td>
<td>Proposed to allow shippers captive to one rail-line to have access to the line of competing rail carriers by proving legislation for a joint-line rate from the traffic's origin to its destination.</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Regulation</td>
<td>Proposed Changes</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Running Rights and Joint-Track</td>
<td>Railway Act Section 134</td>
<td>In instances where &quot;the public interest or consideration of the economy and efficiency of the rail system&quot; justifies the imposition of joint-track usage or shared railway running rights, the Governor-in-Council will be empowered a) to elicit railway co-operation and b) to authorize the (new) Regulatory Agency to determine appropriate compensation for the use of the right-of-way concerned.</td>
</tr>
<tr>
<td>Usage</td>
<td></td>
<td>Section 147. A railway company may (b) use and enjoy the whole or any portion of the right-of-way, terminals . . . of any other railway company; (c) exercise full rights and powers to run and operate its trains on any portion of the railway of any other railway company. (2) The Agency . . . may make orders, directions and impose such conditions . . . as appear just or desirable to the Agency, having regard to the public interest.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section 148(2). Where the Governor in Council is of the opinion that the joint or common use of the same right of way by two or more railways may result in the improvement of the efficiency and effectiveness of transport by rail or may otherwise be in the public interest, the Governor in Council may request the railway concerned to consider such joint or common use.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section 149(1). . . where a line or railway of a company intersects or crosses a line of railway of another company, either company may use and enjoy the right-of-way of the other company within a radius of 50 km of the intersection or crossing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section 153(1). Where a line of railway of one railway company connects with a line of another railway company, the Agency may, on application . . . order the companies that operate those lines to afford all reasonable and proper facilities for the safe and convenient interswitching at an interchange.</td>
</tr>
</tbody>
</table>
Table XI (cont'd)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Regulation</th>
<th>Freedom to Move</th>
<th>Bill C-126</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(2) When the point of origin or of a destination of a movement of traffic is within a radius of 30 km of an interchange or such greater distance therefore as the Agency may prescribe, no company shall transfer that traffic at that interchange otherwise than subject to the terms, conditions and rates prescribed...</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5) The Agency is specified to make regulations specifying the terms and conditions applying to the interswitching limits.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7) The Agency shall review the regulation... no later than five years.</td>
<td></td>
</tr>
</tbody>
</table>
### Annex A.1
Transport of Grain Moving Under the Statutory Rates: Revenues and Costs, 1980 ($ million)

<table>
<thead>
<tr>
<th>Item</th>
<th>CN</th>
<th>CP</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Total Variable Costs</td>
<td>280,066</td>
<td>259,515</td>
<td>539,521</td>
</tr>
<tr>
<td>User Revenues</td>
<td>66,507</td>
<td>64,214</td>
<td>130,721</td>
</tr>
<tr>
<td>Per Cent of Costs</td>
<td>23.8</td>
<td>24.7</td>
<td>24.2</td>
</tr>
<tr>
<td>Gross Revenue Shortfall</td>
<td>213,499</td>
<td>195,301</td>
<td>408,800</td>
</tr>
<tr>
<td>Per Cent of Costs</td>
<td>76.2</td>
<td>75.2</td>
<td>75.7</td>
</tr>
<tr>
<td>Federal Government Payments</td>
<td>78,825</td>
<td>89,106</td>
<td>167,931</td>
</tr>
<tr>
<td>Per Cent of Costs</td>
<td>28.2</td>
<td>34.3</td>
<td>31.1</td>
</tr>
<tr>
<td>Statutory Rate Revenues</td>
<td>66,065</td>
<td>63,815</td>
<td>129,880</td>
</tr>
<tr>
<td>Variable Costs to Statutory Rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues</td>
<td>4.3</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Total Freight Revenues 1980</td>
<td>2,189,400</td>
<td>1,546,800</td>
<td>3,736,200</td>
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**Sources**

Annex A.2
Average Transport Charges in Goods Producing Industries 1981

<table>
<thead>
<tr>
<th>INDUSTRY GROUP</th>
<th>DOMESTIC SALES</th>
<th>EXPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Transport charges from producers to purchasers (delivery transport cost) as a percentage of output valued in producers prices</td>
</tr>
<tr>
<td></td>
<td>All transport</td>
<td>Rail</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Forestry</td>
<td>4.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Fishing, Hunting, Trapping</td>
<td>2.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Gold Mines</td>
<td>1.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Uranium Mines</td>
<td>0.6</td>
<td>0.08</td>
</tr>
<tr>
<td>Iron Mines</td>
<td>10.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Base Metal &amp; Other Metal Mines</td>
<td>3.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Coal Mines</td>
<td>9.8</td>
<td>7.0</td>
</tr>
<tr>
<td>Petroleum and Gas Wells</td>
<td>0.3</td>
<td>0.01</td>
</tr>
<tr>
<td>Asbestos Mines</td>
<td>10.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Gypsum Mines</td>
<td>51.1</td>
<td>31.8</td>
</tr>
<tr>
<td>Salt Mines</td>
<td>38.6</td>
<td>11.6</td>
</tr>
<tr>
<td>Other Non-metal Mines</td>
<td>18.1</td>
<td>8.1</td>
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<tr>
<td>Quarries &amp; Sand Pits</td>
<td>26.4</td>
<td>7.3</td>
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<tr>
<td>Services Incidental to Mining</td>
<td>0.05</td>
<td>0.003</td>
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<tr>
<td>Slaughtering and Meat Processors</td>
<td>1.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Dairy Factories</td>
<td>2.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Fish Products</td>
<td>3.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Fruit and Vegetable Processing</td>
<td>4.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Flour and Breakfast Cereals</td>
<td>4.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Biscuit Mfrs.</td>
<td>2.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Bakers Mfrs.</td>
<td>2.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Confectionary Mfrs.</td>
<td>3.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Sugar Refineries</td>
<td>2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Vegetable Oil Mills</td>
<td>3.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Miscellaneous Food</td>
<td>3.4</td>
<td>1.2</td>
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<tr>
<td>Soft Drink Mfrs.</td>
<td>1.9</td>
<td>0.1</td>
</tr>
<tr>
<td>Distilleries</td>
<td>3.9</td>
<td>0.4</td>
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<tr>
<td>Breweries</td>
<td>1.6</td>
<td>0.4</td>
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<tr>
<td>Wineries</td>
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<td>0.1</td>
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<tr>
<td>Leaf Tobacco Processing</td>
<td>0.7</td>
<td>—</td>
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<tr>
<td>Tobacco Products Mfrs.</td>
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<td>0.3</td>
</tr>
<tr>
<td>Rubber Footwear Mfrs.</td>
<td>1.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Tire and Tube Mfrs.</td>
<td>3.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Other Rubber</td>
<td>2.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Plastic Fabricators</td>
<td>2.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Leather Tanners</td>
<td>1.6</td>
<td>0.01</td>
</tr>
<tr>
<td>Shoe Factories</td>
<td>1.8</td>
<td>0.02</td>
</tr>
<tr>
<td>Leather Glove Factories</td>
<td>3.4</td>
<td>0.002</td>
</tr>
<tr>
<td>Small Leather Goods Mfrs.</td>
<td>2.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Cotton Yarn and Cloth Mills</td>
<td>1.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Wool, Yarn and Cloth Mills</td>
<td>1.5</td>
<td>0.08</td>
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### Annex A.2 (cont’d)

<table>
<thead>
<tr>
<th>INDUSTRY GROUP</th>
<th>DOMESTIC SALES</th>
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<th>EXPORTS</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Transport charges from producers to purchasers (delivery transport cost) as a percentage of output valued in producers prices</td>
<td>Transport charges from producers to the Canadian border as a percentage of output valued in producers prices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All transport</td>
<td>Rail</td>
<td>All transport</td>
<td>Rail</td>
</tr>
<tr>
<td>Synthetic Textile Mills</td>
<td>1.6</td>
<td>0.1</td>
<td>2.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Fiber Preparing Mills</td>
<td>4.0</td>
<td>0.3</td>
<td>10.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Thread Mills</td>
<td>1.2</td>
<td>0.01</td>
<td>1.2</td>
<td>0.01</td>
</tr>
<tr>
<td>Cordage and Twine</td>
<td>6.2</td>
<td>0.7</td>
<td>6.5</td>
<td>0.47</td>
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<td>Narrow Fabric Mills</td>
<td>1.8</td>
<td>0.09</td>
<td>2.7</td>
<td>0.21</td>
</tr>
<tr>
<td>Pressed and Punched Felt Mills</td>
<td>2.4</td>
<td>0.2</td>
<td>3.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Carpet, Mat and Rug Ind.</td>
<td>2.8</td>
<td>0.5</td>
<td>3.9</td>
<td>0.7</td>
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<tr>
<td>Textile Dyeing and Furnishing</td>
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<td>0.06</td>
<td>1.5</td>
<td>0.02</td>
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<tr>
<td>Canvas Products</td>
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<td>0.3</td>
<td>3.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Cotton and Jute Bag Ind.</td>
<td>4.9</td>
<td>0.3</td>
<td>5.5</td>
<td>0.2</td>
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<tr>
<td>Misc. Textile</td>
<td>2.8</td>
<td>0.8</td>
<td>2.3</td>
<td>0.6</td>
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<td>Hosiery Mills</td>
<td>4.1</td>
<td>0.7</td>
<td>2.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Other Knitting Mills</td>
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<td>0.4</td>
<td>2.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Clothing</td>
<td>3.2</td>
<td>0.2</td>
<td>2.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Sawmills</td>
<td>10.9</td>
<td>5.8</td>
<td>11.5</td>
<td>4.1</td>
</tr>
<tr>
<td>Veneer and Plywood</td>
<td>7.6</td>
<td>4.4</td>
<td>5.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Sash, Door and Planing Mills</td>
<td>1.9</td>
<td>0.7</td>
<td>4.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Wooden Box Factories</td>
<td>4.5</td>
<td>0.3</td>
<td>7.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Coffin and Casket</td>
<td>5.5</td>
<td>3.3</td>
<td>6.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Mis. Wood Inds.</td>
<td>6.3</td>
<td>1.2</td>
<td>7.1</td>
<td>1.8</td>
</tr>
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<td>Household Furniture</td>
<td>2.9</td>
<td>0.07</td>
<td>2.0</td>
<td>0.07</td>
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<tr>
<td>Office Furniture</td>
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<td>0.04</td>
<td>1.9</td>
<td>0.3</td>
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<tr>
<td>Other Furniture</td>
<td>2.6</td>
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<td>3.0</td>
<td>0.7</td>
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<tr>
<td>Electric Lamp and Shade</td>
<td>3.6</td>
<td>0.004</td>
<td>3.0</td>
<td>0.02</td>
</tr>
<tr>
<td>Pulp and Paper</td>
<td>5.2</td>
<td>1.9</td>
<td>5.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Asphalt and Related Products</td>
<td>5.8</td>
<td>1.9</td>
<td>4.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Paper Box and Bag Mfrs.</td>
<td>2.3</td>
<td>0.3</td>
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Annex A.2 (cont'd)

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Annex A.2 (cont'd)

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<td>Transport charges from producers to the Canadian border as a percentage of output valued in producers prices</td>
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Source: Statistics Canada. Input-Output models.
Annex A.3  
Book Values of Rates of Return on Selected Class I Railroads, U.S.A.  
1966-1979

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<td>-</td>
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</table>

Costs, Benefits, and the Future of Amtrak

LAURENCE E. TOBEY*

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  of the Bars of New Jersey and the District of Columbia.

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In his State of the Union message on February 6, 1985, President Ronald Reagan demanded an end to federal funding for Amtrak, the National Railroad Passenger Corporation which operates virtually all of the intercity passenger rail service in the United States. Discussing his proposals to reduce the federal budget deficit, the President said:

Third, we must reduce or eliminate costly government subsidies. For example, deregulation of the airline industry has led to cheaper air fares, but on Amtrak taxpayers pay about $35.00 per passenger every time an Amtrak
train leaves the station. It's time we ended this huge federal subsidy.  

Echoing the President's remarks, then-Budget Director David A. Stockman\(^2\) denounced Amtrak as a "mobile money-burning machine" and declared that Amtrak was "the litmus indicator" of whether Congress would have the political courage to bring the deficit under control.\(^3\)

So far, however, Congress has defied the Reagan Administration and has refused to terminate the funding which keeps Amtrak operating. During the budget confrontations of 1985 and 1986, Amtrak has rallied congressional and public support for its continued existence, although at a reduced level of funding.

What accounts for the survival of passenger trains in an era of jet aircraft, deregulated transportation, the interstate highway system, and growing federal budget deficits? Supporters of Amtrak point to a mixture of social and economic benefits which they claim that rail passenger service provides: environmental protection, a high level of passenger safety, energy conservation, and an alternative system of transportation which can be used during national emergencies, strikes, and fuel shortages.\(^4\)

---

1. The State of the Union, 21 WEEKLY COMP. PRES. DOC. 143 (Feb. 6, 1985).
3. "There are few programs I can think of that rank lower than Amtrak in terms of the good they do, the purpose they serve, and the national need they respond to," Mr. Stockman told the Subcommittee on Surface Transportation of the Senate Committee on Commerce, Science, and Transportation. "If we don't have the courage, the foresight, the comprehension of our problem that is sufficient enough to get rid of Amtrak," Mr. Stockman said, "I don't think we're going to shave much off the budget at all. . . . Amtrak is the litmus indicator. . . . Without total subsidy termination and the opportunities offered through liquidation of Amtrak's assets." Mr. Stockman continued, "the Federal Government will continue to pour billions of dollars more into the Amtrak mobile money-burning machine." Stockman Presses Senators to End Amtrak Subsidy, N.Y. Times, April 30, 1985, at A27, col. 4. See also, Young David's Tantrum, N.Y. Times, May 3, 1985, at A31, col. 1.
4. One of the most energy-efficient, safest, fastest, and least environmentally harmful ways of transporting people and goods is the technology of flanged wheel on steel rail. A modern eight-car passenger train can carry 550 passengers one mile on two gallons of diesel fuel. Factor electric power into the equation and energy savings can be increased 30-50 percent. The passenger train has proven itself to be the safest mode of transportation available, far outdistancing cars, planes, and busses [sic] in its per mile safety record. . . . In Western Europe, the average speed of a passenger train is around 80 mph, with the newer express trains averaging around 95 mph. Electrified railroads have also been cited by environmental groups for their positive relationship to the environment.

H. Griesman, Rail Passenger Service and Social Needs, 5 J. INST. FOR SOCIOECONOMIC STUDIES 63 (1980); see also CONGRESSIONAL BUDGET OFFICE, FEDERAL SUBSIDIES FOR RAIL PASSENGER SERVICE: AN ASSESSMENT OF AMTRAK 9 (1982):

The arguments for continuing Amtrak subsidies center around the public benefits conveyed by rail passenger service. Advocates of Amtrak's subsidies contend that a national rail passenger network provides both transportation services and secondary
Opponents of Amtrak ridicule these claims, and charge that Amtrak should not be kept going simply because "it permits Congressmen to have a toy railroad and labor unions to have institutional featherbedding." 5

The essence of the criticism of Amtrak is that the system has cost too much and has failed to produce the benefits Congress intended. 6 To evaluate these charges, it is necessary to answer two questions. First, what benefits did Congress expect as the fruits of its subsidies to Amtrak? And second, how has Amtrak performed in light of these expectations?

The answers to these questions will be presented in the following steps. Congressional intentions toward Amtrak have evolved over the sixteen year history of the system. It will be assumed that this evolution arises from the interaction of Amtrak's actual operations with congressional legislation intended to direct and improve these operations. Therefore, the first step will be to review the historical development of Amtrak and its legislation to determine what Congress expected from the system and how these expectations have changed over time.

The second step is to consider data generated by three studies of Amtrak 7 which attempted to evaluate its performance to determine how Amtrak has performed in light of Congressional expectations.

Finally, the Conclusion will demonstrate that prior studies have underestimated both Amtrak's contribution to the social and economic goals set by Congress and its ability to reduce the need for federal subsidies. The Conclusion will also look at the consequences of the proposed elimination of Amtrak.

II. THE EVOLUTION OF AMTRAK, 1970-1987

A. THE DECLINE OF RAIL PASSENGER SERVICE AND THE CREATION OF AMTRAK

1. THE DISAPPEARANCE OF THE PASSENGER TRAIN

The passenger train was the dominant mode of travel in the United States for nearly a century, from approximately 1850 until 1950. After World War II, passenger rail service rapidly lost its share of the transportation market to the automobile, the airplane, and the intercity bus. Prior to 1958, individual state regulatory commissions had jurisdiction over passenger train discontinuances. In 1958, in order to allow for more rapid discontinuances, Congress gave the Interstate Commerce Commission jurisdiction over passenger train discontinuances. Although the Commission refused to allow rail passenger service to disappear completely, the trend toward extinction was overwhelming. The House Interstate and Foreign Commerce Committee later observed:

In 1929, there were some 20,000 passenger trains in the United States. Nine thousand of these had disappeared by 1946. Here in 1970 there are

8. “Rail intercity passenger traffic had been steadily decreasing since World War II. In 1947 there were 39,921 million intercity passenger miles. By 1970 this figure had shrunk to 6,179 million passenger miles. In 1958 there were 1,450 intercity passenger trains; by 1968 this figure had atrophied to less than 600.” Johnson, Lessons from Amtrak and Conrail, 49 I.C.C. Prac. J. 247, 250 (1982); see also: Thoms, Amtrak: Rail Renaissance or Requiem? 49 Chi. [-]
KENT L. REV. 29, 30 (1972):

The decline of railroad passenger service is a familiar story. The automobile has replaced all other vehicles as the dominant mode of transportation. Much of this change is due to the inherent or supposed advantages of the personal car; some of this change is due to the lack of alternate transportation, especially in suburban and rural areas. Within the common-carrier market, railroads have lost patronage to the airplane and intercity bus. This loss has occurred even in markets not suited for other carriers, this fact giving some credence to the belief that the railroads, intent on concentration on the carload freight traffic, have either let other facilities wither or have actually discouraged use of their trains for travel. The resulting loss occurs when facilities are allowed to become so decrepit and inconvenient that anyone with good sense will avoid them.

9. “Railroad corporations received charters from the states in which they operated, some states requiring that the corporation must be organized under its laws in order to operate in that state. These charters usually vested the railroad with a public mission and some public responsibility. They were chartered for the carriage of passengers and freight for which they were incidentally permitted to charge fares.” W. THOMS, REPRIEVE FOR THE IRON HORSE: THE AMTRAK EXPERIMENT—ITS PREDECESSORS AND PROSPECTS 1 (1973) [hereinafter cited as THOMS].


As a result of the enactment of Section 13a of the Interstate Commerce Act in 1958, all total abandonments and discontinuances of passenger trains by carriers operating in interstate commerce were made subject to at least the concurrent jurisdiction of the Interstate Commerce Commission. Congress thought it necessary to strengthen the financial health of the railroads by, inter alia, allowing the railroads, at their option, to have the ICC, rather than state commissions, pass upon discontinuance or change in the operation of any trains or ferry.

THOMS, supra note 9, at 12.
less than 500 and over 100 of these are presently in the process of discontinuation proceedings before the Interstate Commerce Commission.\textsuperscript{11}

Two explanations have been given for this phenomenon. In 1958, Howard Hosmer (an examiner for the Interstate Commerce Commission) prepared an economic analysis of the rail passenger service industry which claimed that the demand for service was declining because the public preferred to travel by automobile or airplane.\textsuperscript{12} The railroads attempted to compete by providing labor-intensive luxury services, and high labor costs made it impossible to operate profitably. Hosmer concluded that market forces would eventually eliminate passenger rail service as they had eliminated the stage coach.

Not all agreed with Hosmer's analysis. During the 1960s, as passenger trains began to disappear with increasing frequency, supporters of rail passenger service reached a very different explanation, which came to be known as the "discouragement hypothesis."\textsuperscript{13} Because railroad companies could operate freight service at a profit but lost vast amounts of money on passenger trains, some observers claimed that the companies actively discouraged the public from riding their own trains by intentionally providing unacceptably poor service.

Both explanations of the decline of private, for profit passenger rail service are relevant to Amtrak. Critics of Amtrak rely on Hosmer's economic argument that passenger trains are obsolete and inherently inefficient and should be allowed to disappear. Supporters of Amtrak, relying in part on the discouragement hypothesis, argue that passenger trains have a natural place in the transportation system provided they offer a reasonable quality of service to the public.

\begin{footnotes}

\footnote{12. \textit{HILTON, supra note 7, at 8; see also: Note, Amtrak's Legislative Mandate: A Time for Rethinking?, 8 J. LEGIS. 334, 335 (1981).}

\footnote{13. \textit{See generally, P. LYON, To Hell in a Day Coach 226 (1968): “For at least a generation, all of them [the private railroad companies] have, for sundry reasons, persistently sought to scuttle most of their passenger service, and some of them have contrived their passenger business entirely.” See also THOMS, supra note 9, at 17:}

By 1966, the ICC had acknowledged the existence of some ‘downgrading,’ due to the presence of a few horrible examples. Many of the landmark proceedings in which this charge was sustained involved the massive Southern Pacific, a carrier of herculean proportions and great wealth and a singular hostility toward the hapless traveler who sought to utilize its services. . . . After some disappointing experience with newly-equipped trains in the early post-war era, the Southern Pacific decided to rid its rails of passenger trains as expeditiously as possible. . . . [T]he road's legal department was instructed to calculate ways to discourage passengers on the trains in question. The S.P. eliminated all mention of these trains in its timetables, instructed ticket agents to deny their existence, closed the depots a couple of hours before departure time, and forced passengers to ride in a caboose instead of a coach due to 'equipment shortages.' [footnotes omitted].}
2. The High Speed Ground Transportation Act of 1965

Social and environmental concerns in the 1960s led to a public reevaluation of the passenger train and an important federal initiative which helped to preserve it: the High Speed Ground Transportation Act of 1965. In 1962, Senator Claiborne Pell (D-RI) proposed the development of high-speed rail service from Boston to Washington, D.C. as a response to urban congestion, slow highway and air traffic, the high land-use requirements of highway construction, and "the indignities visited upon him while traveling between his constituents in Providence and Senate meetings in Washington." Senator Pell’s proposal generated public support because of widespread frustration with inadequate highway and air transportation and concern over environmental deterioration. Another likely explanation is that as more Americans traveled abroad, they encountered the well-developed passenger rail systems of Western European countries and Japan. Many became convinced that similar service could—and should—be available in the United States. In 1967, the National Association of Railroad Passengers was formed to mobilize public support, lobby for legislation to improve rail passenger service, and oppose passenger train discontinuances.

The High Speed Ground Transportation Act of 1965 authorized the Secretary of Commerce to develop "demonstration projects" as models for improved rail passenger service. Three projects experimented with ideas which were later used by Amtrak. The first was the "turbo train," a light-weight, double-ended train powered by a turbine engine which resembled the Japanese high-speed "bullet" trains. A more famous project was the "Metroliner," an electric train developed jointly by the Department of Transportation and the Penn-Central Railroad. The Metroliner operated at speeds of up to 125 miles per hour, cutting travel time

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15. THOMS, supra note 9, at 27.
16. Id. at 13.
17. Id. at 27.
18. The Turbo train was developed by United Aircraft, Inc., and began operating between New York and Boston on April 8, 1969. Although the Turbotrain was capable of speeds up to 170 miles per hour, in actual service between New York and Boston, its speed had to be held back to 80 miles per hour because of the condition of the right-of-way. Id. at 27-28.
19. The Metroliners began operating between New York and Washington, DC on October 1, 1970, and consisted of self-propelled cars (with no separate locomotive) powered from overhead electric catenary wires. Id. at 28-29. The Metroliner project has been described as one of the few 1960s "Great Society" projects which succeeded in attaining its objective. The reasons for this success are said to be: 1) a clear goal; 2) presidential involvement; 3) skillful project director; 4) project autonomy; 5) a timetable; 6) project visibility; and 7) Congressional support. Shapiro, The Seven Secrets of the Metroliner's Success, PEOPLE AND PUBLIC ADM. 15 (P. Present, ed., 1979).
from Washington to New York from an average of over 4 hours to 2 hours and 59 minutes. The third project planned in this period was a train which would carry both passengers and their automobiles.20

These projects (particularly the Metroliner) are significant in the history of Amtrak because they served as models and gathered public support for improved rail service. Three assumptions were carried over into Amtrak: that new equipment and better service would bring the traveling public back to the trains; that social and environmental policy considerations required improved rail passenger service; and that the federal government should take a leadership role in the development of modern rail passenger service and contribute to the costs.

3. The Creation of Amtrak

Not all of passenger railroading’s problems were technological. Some appeared to be organizational. Before World War II, privately-owned, profit-seeking corporations had been successful in the railroad industry. After the war, rail passenger service’s declining share of the transportation market made competition between profit-seeking corporations seem to be an inappropriate, destructive form of organization for the industry. Instead of encouraging efficiency and innovation, competition between financially weakened corporations which could not earn an adequate return on investment led to the impoverishment of the railroad industry. The deficits created by passenger operations (which in some cases existed only because regulatory agencies required preservation of the service) threatened to bankrupt the railroads, eliminating both passenger and freight service.21

Advocates of revived passenger rail service therefore looked for a different organizational model. Ideas circulating in the late 1960s included: nationalization of the railroads by the government; governmental subsidies to existing railroad companies to cover operating losses; the formation of a public or quasi-public corporation to operate passenger service; and a federal grant program for improved equipment and

20. The plan was not implemented for lack of funding. THOMS, supra note 9, at 29. A non-governmental corporation (the Auto-Train Corporation) operated a commercial auto-ferry service between Lorton, VA (near Washington, DC) and Sanford, FL (near Orlando) from 1971 to 1981. Amtrak revived Auto-train service between these points in 1983. See NATIONAL RAILROAD PASSENGER CORPORATION ANNUAL REPORT 1984 8 (1985) (hereinafter cited as AMTRAK, ANNUAL REPORT 1984).

21. "On a fully-allocated basis, the loss to all American railroads from passenger service in 1957, the year before passage of Section 13a of the Interstate Commerce Act, was $723,670,000, and in 1967 the losses were still $480,000,000." THOMS, supra note 9, at 5. In 1969, the rail passenger service deficit was about $200 million, while total rail net income was only $500 million. 1970 ACT LEG. Hist., supra note 11.
facilities.\textsuperscript{22} The legislative history of the bill which ultimately created Amtrak emphasized that Congress believed that rail passenger service was about to disappear completely, and that if it did, the public would suffer serious social and environmental consequences.\textsuperscript{23} Congress agreed that the situation called for more than the perpetuation of existing organizations and services: "Positive action and a completely new direction is required—and urgently required—now. That is the intent of this bill [H.R. 17849]. It envisions a completely new effort to save and promote rail passenger service."\textsuperscript{24}

Secretary of Transportation John Volpe proposed the bill which led to the creation of Amtrak.\textsuperscript{25} Volpe's plan was a modification of an earlier scheme called "Railpax." The modified plan rejected nationalization, but combined the idea of a new corporation to operate rail passenger service with federal grants for new equipment. The modified Railpax bill passed the Senate on May 6, 1970 by a vote of 78 to 3.\textsuperscript{26} Shortly after the Senate vote, the Penn Central Railroad filed for bankruptcy and petitioned to discontinue virtually all of its trains. This led the House to enact a Railpax bill with more funding than the Senate version, which it did by a unanimous voice vote on the motion of Commerce Committee Chairman Harley Staggers (D-WVA).\textsuperscript{27} On the same afternoon, the Senate unanimously adopted a motion by Acting Majority Leader Robert Byrd (D-WVA) to adopt the House bill. Despite opposition from the Council of Economic Advisors and some members of the White House staff, President Richard M. Nixon signed the Rail Passenger Service Act of 1970 on October 30, 1970.\textsuperscript{28}

\textbf{B. SUMMARY OF THE RAIL PASSENGER SERVICE ACT OF 1970}

Section 101 of the Rail Passenger Service Act of 1970 sets forth the "Congressional Findings and Declaration of Purpose."\textsuperscript{29} This section is

\begin{itemize}
  \item[22.] THOMS, supra note 9, at 35-37.
  \item[23.] 1970 ACTLEG.HIST., supra note 11, at 4736-4737.
  \item[24.] 1970 ACT LEG. HIST., supra note 11, at 4736.
  \item[25.] THOMS, supra note 9, at 36-37.
  \item[26.] THOMS, supra note 9, at 37.
  \item[27.] THOMS, supra note 9, at 38.
  \item[28.] There was a last minute snafu as the Council of Economic Advisors, the Office of Management and Budget and some high White House staff men counseled against the Corporation plan as a waste of money. Reportedly, this gave President Nixon some cause for hesitating before signing the bill, but Secretary Volpe and the lobbies which had supported the bill rallied another show of support and the President, facing Congressional elections, signed the bill on Friday, October 30, 1970.
  \item[29.] Id. at 38.
\end{itemize}

particularly important to the present inquiry because in it Congress explained the purpose for creating Amtrak and specified the benefits Congress expected to gain from it. The overriding purpose of the original findings section was clearly to preserve rail passenger service from extinction. Congress declared that rail passenger service was a "necessary part of a balanced transportation system," and that such service was required for public convenience and necessity. Congress declared that "the traveler in America should to the maximum extent feasible have freedom to choose the mode of travel most convenient to his needs." Congress also expressly recognized a further benefit: "rail passenger service can help to end the congestion on our highways and the overcrowding of airways and airports." Although this section would be repeatedly amended, the original objectives (preserve the service, give the traveler freedom of choice, and alleviate highway and airport congestion) have remained the fundamental objectives for Amtrak.

Pursuant to these findings, Section 201 of the 1970 Act directed the Secretary of Transportation to design a route system for intercity passenger trains, and to recommend the quantity and type of service. Intercity passenger service was initially defined to exclude both commuter service and auto-ferry service.

Sec. 101. Congressional Findings and Declaration of Purpose. The Congress finds that modern, efficient, intercity railroad passenger service is a necessary part of a balanced transportation system; that the public convenience and necessity require the continuance and improvement of such service to provide fast and comfortable transportation between crowded urban areas and in other areas of the country; that rail passenger service can help to end the congestion on our highways and the overcrowding of airways and airports; that the traveler in America should to the maximum extent feasible have freedom to choose the mode of travel most convenient to his needs; that to achieve these goals requires the designation of a basic national rail passenger system and the establishment of a rail passenger corporation for the purpose of providing modern, efficient, intercity rail passenger service; that Federal financial assistance as well as investment capital from the private sector of the economy is needed for this purpose; and that interim emergency Federal financial assistance to certain railroads may be necessary to permit the orderly transfer of railroad passenger service to a railroad passenger corporation.


30. The basic purpose of this bill is to prevent the complete abandonment of intercity rail passenger service and to preserve a minimum of such service along specific corridors. The overriding purpose of this legislation is to preserve and promote intercity rail passenger service and it is neither a duplication of, nor a substitute for, any other program (private or Federal) directed toward the urgently needed solutions of surface transportation problems.

1970 ACT LEG. Hist., supra note 11, at 4735.


32. This section provides in full: There is authorized to be created a National Railroad Passenger Corporation. The Corporation shall be a for profit corporation, the purpose of which shall be to provide intercity rail passenger service, employing innovative operating and marketing concepts so as to fully develop the potential of modern rail service in meeting the Nation's intercity
Section 301 of the 1970 Act created the “National Railroad Passenger Corporation.” The purpose of the Corporation was to “provide intercity rail passenger service, employing innovative operating and marketing concepts so as to fully develop the potential of modern rail service in meeting the Nation’s intercity passenger transportation requirements.” Rejecting nationalization, the 1970 Act provided that “[t]he Corporation will not be an agency or establishment of the United States Government.” Rather, the NRPC was to be a private corporation subject to the District of Columbia Business Corporation Act and the provisions of the 1970 Act itself. As a private corporation, the NRPC was subject to its Board of Directors, which consisted of both public and private members.

Title IV of the 1970 Act provided that the NRPC would assume the responsibility for rail passenger service from the private railroads, thus superseding the operating authority previously granted by the Interstate Commerce Commission. The NRPC was directed to offer contracts to railroads to relieve them of their passenger service, in return for a payment to the NRPC based on each railroad’s 1969 passenger service deficit. The NRPC could then contract with the railroads to provide the much-reduced “Basic System” of service designated by the Secretary of Transportation. The NRPC was directed to begin operation of the Basic System on May 1, 1971, and was obliged to continue operating those trains until July 1, 1973. The NRPC also had the right to add other trains if this was consistent with prudent management. If operated for two years, such trains would become part of the Basic System. State, regional, or local agencies could request the NRPC to provide service if the requesting agency agreed to pay 66.6 percent of the losses associated with this service. Private railroads which chose not to contract with the

passenger transportation requirements. The Corporation will not be an agency or establishment of the United States Government. It shall be subject to the provisions of this Act and, to the extent consistent with this Act, to the District of Columbia Business Corporation Act. The right to repeal, alter, or amend this Act at any time is expressly reserved.

33. Id.
34. Id.
35. Id.
37. 1970 Act, supra note 29, § 401. This section provides: "(a)(l) On or before May 1, 1971, the Corporation is authorized to contract and, upon written request therefor from a railroad, shall tender a contract to relieve the railroad, from and after May 1, 1971, of its entire responsibility for the provision of intercity rail passenger service."
41. 1970 Act, supra note 29, § 403(a).
42. 1970 Act, supra note 29, §§ 403(b)-403(c).
NRPC were prohibited from discontinuing their trains until January 1, 1975.\(^{43}\)

The NRPC's financing plan was based on the payments by the railroads mentioned above, the sale of stock, a $40 million direct federal grant, and federal loan guarantees. Common stock could be issued only to railroads.\(^{44}\) Railroads could pay for common stock in cash, equipment, or future services.\(^{45}\) Railroads which did not buy stock but which contributed equipment were allowed a tax deduction.\(^{46}\)

The 1970 Act authorized a direct federal grant of $40 million to the Secretary of Transportation for start-up expenses.\(^{47}\) The 1970 Act also authorized loan guarantees of $100 million for the NRPC to acquire new equipment and to improve facilities,\(^{48}\) and further loan guarantees of $200 million to railroads to enable them to perform their service contracts with the NRPC.\(^{49}\)

Finally, the 1970 Act required railroads and the NRPC to ensure "fair and equitable" arrangements to protect employees affected by service discontinuances.\(^{50}\) Contracts were required to protect individual employees from a worsening of their positions with respect to their employment.\(^{51}\) The statute required the Secretary of Labor to certify that all contracts between the NRPC and the railroads had given employees fair and equitable protection.\(^{52}\) The 1970 Act also required that laborers and mechanics be paid at the rates prevailing in the locality as determined by

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43. 1970 Act, supra note 29, § 404(a).
44. 1970 Act, supra note 29, § 304(a).
45. 1970 Act, supra note 29, § 304(a); 401(a)(2).
46. 1970 Act, supra note 29, § 901.
47. 1970 Act, supra note 29, § 601.
50. 1970 Act, supra note 29, § 405(a).
51. 1970 Act, supra note 29, § 405(b). This section provides:

Such protective arrangements shall include, without being limited to, such provisions as may be necessary for (1) the preservation of rights, privileges, and benefits (including continuation of pension rights and benefits) to such employees under existing collective-bargaining agreements or otherwise; (2) the continuation of collective bargaining rights; (3) the protection of such individual employees against a worsening of their positions with respect to their employment; (4) assurances of priority of reemployment of employees terminated or laid off; and (5) paid training or retraining programs. Such arrangements shall include provisions protecting individual employees against a worsening of their positions with respect to their employment which shall in no event provide benefits less than those established pursuant to section 52(f) of the Interstate Commerce Act. Any contract entered into pursuant to the provisions of this title shall specify the terms and conditions of such protective arrangements. No contract under section 401(a)(1) of this Act between a railroad and the Corporation may be made unless the Secretary of Labor has certified to the Corporation that the labor protective provisions of such contract afford affected employees fair and equitable protection by the railroad.
52. Id.
the Secretary of Labor. In addition, the NRPC was prohibited from contracting out work normally performed by bargaining unit employees if the contracting-out would result in layoffs of bargaining unit employees.

B. AMTRAK IN OPERATION, 1971-1986

Amtrak’s history can best be understood as divided into two periods. During the first period, 1971-78, Amtrak expanded its route system, increased its services, and acquired new operating equipment. Federal expenditures rose dramatically. The second period, from 1978 to the present, has been characterized by Congressional demands for cost control. Routes and services have been cut back, and few new trains have been added. The most extreme examples of the latter tendency are the Reagan Administration’s attempt to limit Amtrak to the Boston-Washington Northeast Corridor in 1981, to eliminate all funding for the system in 1985-87, and to sell the Northeast Corridor in 1987.

1. AMTRAK’S EARLY HISTORY, 1971-78

As directed by statute, the NRPC began operations on May 1, 1971. The “Amtrak” nickname was adopted soon afterward. The Basic System designed by the Secretary of Transportation was nationwide in scope. In addition to routes through crowded urban areas, the Basic System preserved several long-haul routes in the western United States. Many of the routes were continuations of trains from the private

53. 1970 Act, supra note 29, § 405(d).
54. 1970 Act, supra note 29, § 405(e).
56. See THOMS, supra note 11, at 1, 55; see generally H. Edmonson, Journey to Amtrak (1972).
57. The nickname is derived from “American Travel by Track”. Johnson, Lessons from Amtrak and Conrail, 49 I.C.C. PRAC. J. 247, 250 (1982); see also THOMS, supra note 11, at 51-52.
58. The system as initially proposed consisted of the following routes: New York-Boston; New York-Washington; New York-Buffalo; New York-Chicago; New York-Kansas City; New York-Miami/St. Petersburg/Tampa; New York-New Orleans; Washington-Chicago; Washington- St. Louis; Norfolk-Cincinnati; Chicago-St. Louis; Chicago-Miami/St. Petersburg/Tampa; Chicago-Los Angeles; Chicago-San Francisco; Chicago-Seattle; Chicago-Detroit; Chicago-Houston; Chicago-New Orleans; Chicago-Cincinnati; New Orleans-Los Angeles; Seattle-San Diego.
59. THOMS, supra note 11, at 49-51.

It is questionable whether the national system foreseen by [Secretary of Transportation] Volpe came within the intent of Congress. David P. Morgan, editor of Trains magazine observed: ‘Railpak [sic] is now committed to spreading its thin resources over thousands of miles of barren desert and lonely prairie-far from the ‘clogged highways’ and ‘jammed airways’ that were the agreed reasons for its creation.

THOMS, supra note 11, at 47 (footnote omitted).
railroad era, and some preserved the traditional train names. However, the immediate effect of Amtrak's assumption of service was to eliminate nearly half of the passenger trains then in service. The discontinuation of one pair of trains led plaintiffs in Illinois to challenge the Rail Passenger Service Act of 1970 on constitutional grounds, but the federal district court refused to invalidate the statute.

Amtrak began its task of revitalizing rail passenger service with salvaged remnants of the private railroad era. Passengers in the early years noticed few improvements. During 1973-74, the Special Subcommittee on Investigations of the House Committee on Interstate and Foreign Commerce undertook a series of inspection tours on twelve of Amtrak's long-haul passenger trains. Their report was a catalogue of all-too familiar complaints: poor on-time performance, unprofitable food and beverage service, dilapidated stations and terminals, irritations to passengers

60. On March 22, 1971, the NRPC made its final decisions, which can be summarized as follows: 184 trains were to operate, of which four would run tri-weekly, the rest daily. Such a system would serve 85 percent of our urban population. This is a reduction of over 50 percent in the number of trains operating in October 1970-April 1971.

THOMS, supra note 11, at 48.


62. HOUSE COMM. ON INTERSTATE AND FOREIGN COMMERCE, SPECIAL SUBCOMM. ON INVESTIGATIONS, 93rd Cong., 2d Session, REVIEW OF AMTRAK OPERATIONS—CONDITION OF AMTRAK TRAINS, (Subcomm. Print 1974) [hereinafter cited as 1974 SUBCOMMITTEE INVESTIGATION].

63. It is generally recognized that an essential element to Amtrak's maintaining good passenger relations is for the trains to arrive on time with a reasonable degree of regularity. In this regard, Amtrak reported that 'on-time performance' was the second most frequent category of criticism received from passengers (air conditioning and heating being the most frequent). Amtrak's poor on-time performance has tended to discourage public confidence in the reliability of passenger trains and consequently, potential riders have chosen other means of transportation. The on-time performance for every train included in this review was considerably worse during calendar year 1973 than during 1972.

Id. at 5-6.

64. Food and beverage service on board Amtrak trains is extremely unprofitable. Since its inception, Amtrak has not attempted to make this service profitable. Amtrak officials explained that it would take considerable time before all equipment and services could be improved to the extent passengers deserved but that food and beverage services could be made attractive in a relatively short period. It was therefore decided that the food and beverage service could be a harbinger of the refurbishment program as a highly visible improvement of substantial importance to many passengers. Amtrak operating expenses amounted to $33.3 million. Based on the above study in which operating expenses were over three times the revenue collected, the total Amtrak expense probably resulted in a deficit of over $22 million not considering the other related costs mentioned above.

Id. at 10-11.

65. Many stations, aside from obvious antiquity, are dimly lit, sorely in need of cleaning and paint, inhabited by derelicts, and provide few if any facilities such as food service, newsstands, travelers' aid booth, barbershops, gift shops, etc. The facilities in the Los Angeles station, for example, which is pictured in Amtrak's brochure with the caption 'Beautiful Union Station, Los Angeles' are limited to four food and drink and two newspaper vending machines. The Pittsburgh station has no facilities. The Miami sta-
from pets on board and smoking, slow and inaccurate ticketing and reservations, and rude and unhelpful railroad personnel. Amtrak faced three major problems which will be considered in some detail: the condition of its operating equipment and right-of-way; the contract system with the private railroads; and the politicization of the route system.

A. OPERATING THE EQUIPMENT AND RIGHT-OF-WAY

The locomotives and passenger cars which Amtrak received in 1971 (sometimes called "the heritage fleet") averaged twenty-one years in age. Much of this equipment was in poor condition because of age and deferred maintenance, which caused operating delays, increased costs,

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66. Amtrak issued a policy in April 1973 permitting passengers in private rooms and coaches to take one pet into their accommodations, 'provided that the pet is not objectionable in any way.' Train personnel have considerable difficulty enforcing this policy. Also, many passengers bring dogs into private rooms without containers, leashes, or muzzles. In addition, there are instances where dogs, cats, and birds were properly restrained when placed on board but released in the rooms. One review of maintenance and repair of passenger cars disclosed a number of instances where pets had torn curtains and upholstery and severely soiled carpeting and upholstery—some so badly that complete replacement was necessary. In addition, reportedly there have been instances where private rooms have become completely uninhabitable and had to be sealed during a trip after a passenger detained.

Id. at 14.

67. A passenger boarding the train [the "Broadway Limited"—New York and Washington to Chicago] in Washington . . . attempted to transfer from coach to roomette accommodations. The conductor had a manifest indicating that less than 50 percent of the roomettes were reserved. However, he informed the passenger that a transfer could not be effected because he had no assurance that the manifest was accurate. Consequently, the passenger remained in the coach for the entire trip whereas ironically roomettes remained available throughout the entire trip.

Id. at 18.

68. The crew on this train [the "Empire Builder" (Seattle-Chicago)] are railroad employees. The attitude and general helpfulness of these employees were poor and confirmed the necessity for Amtrak to expedite its program of assuming control of train service personnel. For example, the attendant in the lounge car was not on duty for several extended periods. On three occasions during the trip, the attendant was present but was observed to be sound asleep. Moreover, he expressed displeasure when awakened by passengers desiring to make purchases.

Id. at 44-45.

69. THOMS, supra note 11, at 59; NATIONAL RAILROAD PASSENGER ANNUAL REPORT 1975, 22 (1976) [hereinafter cited as AMTRAK ANNUAL REPORT 1975]; GEN. ACCOUNTING OFFICE, QUALITY OF AMTRAK RAIL PASSENGER SERVICE STILL HAMPERED BY INADEQUATE MAINTENANCE OF EQUIPMENT 1 (1976); MULVEY, supra note 7, at 32. Amtrak's ability to provide service has been severely limited by the size of its operating fleet. Congressional investigators have found that as the frequency of service over a route is increased (affording more convenient arrival and departure options), ridership often increases exponentially. 1979 ACT LEG. HIST., supra note 5, at 1206.

When compared with other national passenger rail systems, the limited size of Amtrak's operating fleet is apparent.

Id. at 54.
and discouraged passengers. Sometimes the delays caused by equipment failures led to further costs, as Amtrak was obliged to pay overtime to employees and maintenance personnel, and to placate irate customers with free meals and overnight accommodations.

The poor condition of railroad rights-of-way has been a problem throughout Amtrak's history. In order to win passengers from competing modes of transportation, passenger trains must operate at reasonably high speeds. High-speed rail service requires a higher standard of track quality than freight service, which is operated at lower speeds. The pri-

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70. There are several ways in which a delayed train can affect the efficiency and wages of maintenance personnel. For example, it was noted during this review that when the 'Sunset Limited' [New Orleans to Los Angeles] is late, there is a considerable disruption to the work schedule of the maintenance personnel. This train should arrive in the yard for servicing at about 8:00 am. As this is the only train in the yard at that time, when it is delayed the work force of about 30 cleaners and 100 skilled and semi-skilled laborers cannot be productively employed. Large numbers of laborers were observed on several occasions completely idle for two and three hour periods. Moreover, these same employees were required to work overtime on many of these same occasions because it was necessary to service the 'Sunset Limited' and other trains later in the day so that they could depart on time.

Similarly, the servicing crew at the St. Louis Terminal is frequently required to work overtime because of the late arrival of the 'National Limited' [Washington to Kansas City]. This train is scheduled to depart eastward 15 minutes before a change in service crews. If the train is more than 15 minutes late the first crew must remain on duty at overtime rates to service the train because the second crew is not available due to being needed to service other trains scheduled to depart northward shortly after they come on duty.

1974 SUBCOMMITTEE INVESTIGATION, supra note 62, at 8.

71. An estimate cannot be made as to the costs incurred by Amtrak due to train delays. . . . Amtrak does, however, maintain an account entitled 'Accommodations, other transportation, and miscellaneous emergency services provided for inconvenience passengers'. Almost $250,000 was charged to this account during the first 10 months of 1973.

Id. at 9.

vate railroads had no incentive to keep their tracks in condition to run high-speed passenger service. But although freight railroads could tolerate slow-speed track quality, Amtrak could not. Poor track quality in some areas continues to require Amtrak trains to operate at reduced speeds. An ironic result of Amtrak's entry into operation was that initially, train on-time performance actually fell because track maintenance projects had to be instituted to bring the right-of-way up to standard for passenger service, and the maintenance work created delays.\textsuperscript{73}

\textbf{B. AMTRAK'S CONTACTS WITH THE RAILROADS}

From 1971 until 1976, Amtrak owned no track and operated no trains directly. Instead, it relied on contract service with the private railroads. Studies by the General Accounting Office in the mid-1970s focused on Amtrak's contractual relationships with the private railroads and found them unsatisfactory.\textsuperscript{74} The first contracts, negotiated in 1971, did not create incentives for high-quality service and merely reimbursed the railroads for the costs incurred. As a result, railroads "were paid as much for poor service as for excellent," and costs were not controlled.\textsuperscript{75}

In 1974, Amtrak negotiated a second series of contracts which provided for incentives for good performance and penalties for poor performance.\textsuperscript{76} However, General Accounting Office reported that by June 30, 1976, Amtrak had paid the railroads $33.6 million in incentives for on-time performance, but that actual on-time performance had not improved.\textsuperscript{77} Rather, the General Accounting Office claimed that Amtrak liberalized the criteria for on-time performance.\textsuperscript{78}

After 1976, Amtrak negotiated a third group of contracts with 14 of the 20 operating railroads. Nevertheless, the General Accounting Office reported that Amtrak was not able to obtain railroad consent to contracts which encouraged better on-time performance.\textsuperscript{79}

\textbf{C. GROWTH AND POLITICIZATION OF THE ROUTE SYSTEM}

The Amtrak Improvement Act of 1973\textsuperscript{80} began the expansion of the

\textsuperscript{73} 1974 \textsc{Subcommittee Investigation}, \textit{supra} note 62, at 6.


\textsuperscript{75} \textit{Id.} at ii.

\textsuperscript{76} \textit{Id.} at i.

\textsuperscript{77} \textit{Id.} at ii.

\textsuperscript{78} \textit{Id.} at ii-iii.

\textsuperscript{79} \textit{Id.} at iii.

Amtrak route system. The 1973 Act directed the NRPC to initiate at least one experimental route each year.\textsuperscript{81} Each new route was to be operated for two years, after which the route would be added to the Basic System or terminated. The 1973 Act also called for international service to link the Basic System with Montreal and Vancouver in Canada and Nuevo Laredo in Mexico.\textsuperscript{82} Route mileage grew from 22,000 miles in 1973 to 27,000 miles in 1979.\textsuperscript{83} At its greatest expansion in 1979, the Amtrak system served 571 station stops, up from 440 in 1972.\textsuperscript{84}

Much criticism has been directed at Amtrak because the route system has allegedly been distorted to satisfy the demands of influential politicians.\textsuperscript{85} Because Amtrak was freed from the regulatory burden under which the private railroads had operated, Amtrak had greater flexibility in initiating new services. This flexibility allegedly permitted political interference in route and service decisions.\textsuperscript{86} "Political trains" allegedly operated without regard to the costs incurred or the ridership generated.\textsuperscript{87} One observer claimed that "'[p]rofit goals became secondary to securing

\textsuperscript{81} Section 403 of the Rail Passenger Service Act of 1970 (45 U.S.C. 563), relating to new service, is amended by adding at the end thereof the following new subsection: (d). The Corporation shall initiate not less than one experimental route each year, such route to be designated by the Secretary [of Transportation] and shall operate such route for not less than two years. After such two-year period, the Secretary shall terminate such route if he finds that it has attracted insufficient patronage to serve the public convenience and necessity, or he may designate such route as a part of the Basic System.

\textsuperscript{82} 1973 Act, supra note 80, § 11(a).

\textsuperscript{83} 1973 Act, supra note 80, § 6(a)(7).

\textsuperscript{84} Guess, Profitability Guardians and Service Advocates: The Evolution of Amtrak Training, supra note 55, at 388, gives the figures 23,000 miles in 1972 compared with 26,000 miles in 1977; Amtrak annual reports give the figures 22,000 in 1973 compared with 27,000 in 1979.


\textsuperscript{86} AMTRAK, ANNUAL REPORT 1975 at 22; AMTRAK ANNUAL, REPORT 1981 at 29.

\textsuperscript{87} "Amtrak, as a creature of legislation, is very sensitive to political pressures. To survive politically, it must serve as many geographic areas of the country as possible. Instead of concentrating efforts on high-speed service in the densely populated areas, Congress drew the routes to cover as much ground as possible." Note, Amtrak's Legislative Mandate: A Time for Rethinking 8 J. LEGIS. 334, 337 (1981).

\textsuperscript{88} Because there were no objective guidelines for performance measurement of existing or proposed routes, the Corporation was forced to make decisions on starting new routes based on congressional support, and intense political jockeying accompanied each new funding request. Without definite performance criteria, the Corporation could be forced into continuing an unprofitable service in return for political support of its annual funding request. Management's susceptibility to these political considerations hampered its ability to make sound economic decisions on route structure and equipment allocation.


'friends' in Congress.' 88 Legislation was eventually enacted to establish economic standards for train discontinuances to eliminate unprofitable but politically-sensitive trains. 89

D. TRANSITION OF THE SYSTEM, 1974-78

During the middle 1970s, three developments took place which affected Amtrak's future: the introduction of new equipment beginning in 1975; the "Northeast Corridor Improvement Project"; and the "energy crisis" of 1973-74 and 1978-79.

The arrival of the first modern operating equipment in 197590 had a major impact on Amtrak's operations. The equipment received from the private railroads in 1971 suffered from frequent breakdowns, required large amounts of maintenance time, and was unappealing to the traveling public. Moreover, this equipment was designed for another era, in which fuel costs and energy conservation were not primary design criteria. The "heritage cars" were steel-bodied, heavy-weight equipment designed to provide a smooth ride and maximum comfort for long-distance travel. 91 Such equipment consumed large amounts of energy in operation.

By contrast, the new equipment was designed for current operating and economic conditions. The "Amfleet" passenger cars were lightweight aluminum day coaches which featured reclining seats mounted on tracks in the floor so that the accommodations could be changed for dif-

89. Amtrak Improvement Act of 1981, Pub. L. No. 97-35, 95 Stat. 687 (1981) [hereinafter cited as 1981 Act]. § 1182(a) provided that all route additions would have to satisfy standardized "Route and Service Criteria"; § 1183(b)(4)(B) required Amtrak to review each route in the Basic System annually and discontinue, modify, or adjust the service to meet the applicable criteria.
90. Amtrak accepted delivery of 115 "Amfleet" passenger cars from the Budd Company in 1975. The order consisted of 91 coaches, 11 cafe cars, and 13 club cars which were patterned after "Metroliner" equipment developed by the Department of Transportation and the Penn Central Railroad. AMTRAK, ANNUAL REPORT 1975 at 16. See also P. DORIN, AMTRAK TRAINS AND TRAVEL 17-18 (1979) [hereinafter cited as DORIN].
91. At this time [September, 1971], Amtrak exercised its option to purchase the best 1190 available intercity cars and leased 12 new Metroliners originally scheduled for a Philadelphia-Harrisburg schedule. Most of the cars came from Western railroads, where maintenance and service was superior, and were quickly shifted to Eastern runs, where most of the passengers—and the deferred maintenance—were located. 441 came from Santa Fe, 196 from Burlington Northern, 120 from Union Pacific, 80 from Southern Pacific, 276 from Seaboard Coast Line, 25 from Louisville & Nashville, 19 from Richmond, Fredericksburg & Potomac, 16 from Norfolk & Western, 11 from Chesapeake & Ohio and 6 from Baltimore & Ohio. ... The cars cost an average of $14,000 apiece, which sounds like a good deal until you realize that they were built anywhere between 1937 and 1965. ... Not only did the railroads have no other buyer, but they stopped servicing and maintaining the cars as soon as the Amtrak Act was passed, and Amtrak has an unduly high percentage of bad-order cars on its hands.

THOMS, supra note 9, at 59.
different kinds of services. The new cars were designed for "head end power," meaning that their heat, light, and power were generated electrically by the locomotive, replacing the traditional steam heat systems on older cars which were unreliable. New electric locomotives were developed for service on the Northeast Corridor, and new diesel locomotives were developed for service on the non-electrified portions of the system. For use in the western United States, where tunnel clearances permitted taller cars, Amtrak introduced double-level "Superliner" cars in 1978. The arrival of new equipment addressed numerous problems. The new equipment was more appealing to the public. It permitted reductions in maintenance costs, was less subject to breakdowns, and was more energy efficient, partially offsetting rising fuel costs.

The second major development was Amtrak's acquisition of the Northeast Corridor Boston-Washington main line and several branch lines under the Railroad Regulatory Reform and Revitalization Act of 1976. Amtrak was given ownership of the line, which formerly belonged to the bankrupt Penn Central and New Haven railroads. For the first time in its history, Amtrak owned right-of-way and was able to provide service directly instead of through contracting railroads. The 4-R Act also called for the improvement of the right-of-way, establishing the "Northeast Corridor Improvement Project." The 4-R Act required reduction of trip times to 2 hours, 40 minutes from Washington to New York and 3 hours, 40 minutes from New York to Boston. The planned improvements consisted of replacing the track with continuous welded rail ("ribbon rail") set into concrete ties; elimination of road crossings; straightening and banking curves; modernization of signal systems; replacement of the electrical lines from Washington to New Haven; and extension of electrified service from New Haven to Boston. The work was to be completed by 1980, but the deadline was later extended to 1985.

The third major development affecting Amtrak's history was the "en-

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92. AMTRAK, ANNUAL REPORT 1975 at 16; DORIN, supra note 90, at 25.
93. DORIN, supra note 90, at 25-27.
94. AMTRAK, ANNUAL REPORT 1978 at 14.
96. From the Penn Central, Amtrak acquired its 456 mile line from Washington to Boston, plus branches of 62 miles from New Haven, Conn., to Springfield, Mass., and 103 miles from Philadelphia to Harrisburg—a total of 621 miles of route ranging from two to six tracks. The corporation also acquired track from Michigan City, Indiana to Kalamazoo, Michigan.
ergy crisis" of the 1970s.\textsuperscript{100} Political developments in the Middle East (the Arab oil embargo of 1973-74 and the Iranian Revolution of 1978-79) led to interruptions of oil supplies and rising fuel prices in the United States. Public use of gasoline for automobile travel was restricted, and the federal government advised the public to conserve energy, in particular by using public transportation. Amtrak’s ridership increased during both oil shortages, jumping from 16.9 million in 1973 to 18.2 million in 1974, before falling back to 17.4 million in 1975.\textsuperscript{101} Similarly, during the Iranian crisis, ridership rose from 18.9 million in 1978 to 21.4 million in 1979, before gradually falling.\textsuperscript{102} Amtrak’s experience in the oil shortages created the perception that rail passenger service should be maintained because it is energy efficient, and because it can be used as an alternative form of transportation during emergencies. This perception affected Congressional thinking in subsequent Amtrak legislation.

2. **AMTRAK’S LATER HISTORY, 1978-PRESENT**

The Amtrak Improvement Act of 1978\textsuperscript{103} represented a turning point in Congressional policy. It began a trend which has stressed cost reduction and improved economic performance at the expense of continued expansion.\textsuperscript{104} The 1978 Act directed the Secretary of Transportation to re-examine the route system to eliminate underused services.\textsuperscript{105} In 1979, when the Secretary’s review was completed, several long-haul trains

\begin{itemize}
\item \textsuperscript{101} Amtrak, Annual Report 1975 22 (1976).
\item \textsuperscript{102} Amtrak, Annual Report 1981 29 (1982).
\item \textsuperscript{103} Amtrak Improvement Act of 1978, Pub. L. No. 95-421, 92 Stat. 923 (1978) [hereinafter cited as 1978 Act].
\item \textsuperscript{104} See Guess, supra note 55, at 390: "Under growing attack from the thrust of the CBO [Congressional Budget Office] and GAO [General Accounting Office] analyses, which aided profitability guardians in FRA [Federal Railroad Administration], the balance began to shift toward the profitability pole".
\item \textsuperscript{105} 1978 Act, supra note 103, § 4(a): The Secretary of Transportation [hereinafter in this section referred to as the Secretary], in cooperation with the National Railroad Passenger Corporation [hereinafter in this section referred to as the Corporation], shall immediately develop preliminary recommendations for a route system for the Corporation which will provide and [sic] optimal intercity railroad passenger system, based upon current and future market and population requirements, including where appropriate portions of the Corporation’s existing route system. In developing such recommendations, the Secretary shall consider—
\begin{itemize}
\item (1) any unique characteristics and advantages of rail service as compared to other modes of transportation;
\item (2) the role that rail passenger service can play in helping meet the Nation’s transportation needs while furthering national energy conservation efforts;
\item (3) the relationship of benefits of given intercity rail passenger services to the costs of providing such services, computing the benefits in passenger per train mile
\end{itemize}
\end{itemize}
were discontinued. Recognizing that Amtrak was unlikely to make a profit, Congress redesignated the NRPC from a "for profit corporation" to a corporation "operated and managed as a for profit corporation." Reflecting concerns that Amtrak was having a harmful effect on the intercity bus industry, the 1978 Act conferred jurisdiction on the Interstate Commerce Commission to hear complaints from bus companies that Amtrak had engaged in predatory pricing, and called for a study of Amtrak's increasing effect on the intercity bus industry.

The 1979 Amtrak Reorganization Act continued the trend toward cost control and increased standards for performance. The 1979 Act imposed specific goals for Amtrak's management, requiring improved service and economic performance. The 1979 Act also directed the

and revenues earned and computing the costs in loss of profit per passenger mile rather than total loss or profit per route;

(4) the transportation needs of areas lacking adequate alternative forms of transportation;

(5) frequency and fare structure alternatives and the impact of such alternatives on ridership, revenues, and expenses of rail passenger service; and

(6) the adequacy of other transportation modes serving the same points to be served by the recommended route system.

106. B. GOLDBERG, AMTRAK: THE FIRST DECADE 13 (1981). The trains eliminated included: the "Champion" (New York-St. Petersburg), the "Floridian" (Chicago-Miami), the "National Limited" (New York-Kansas City), the "North Coast Hiawatha" (Chicago-Seattle via southern route through Montana), the "Hilltopper" (Virginia-Boston), and the "Lone Star" (Chicago-Houston).


108. Notwithstanding the provisions of section 306 of the Rail Passenger Service Act (45 U.S.C. 546), the Interstate Commerce Commission shall have, upon the application of any aggrieved motor carrier, jurisdiction under any applicable provision of part 1 of the Interstate Commerce Act over any rate, fare, charge, or marketing practice of the National Railroad Passenger Corporation with respect to any route or service which operates at a loss for the purpose of hearing the complaint over unfair or predatory practice. Id. at § 7.

109. Id. at § 6.


111. SEC. 102 GOALS. THE CONGRESS HEREBY ESTABLISHES THE FOLLOWING GOALS FOR AMTRAK:

(1) Improvement of on-time performance by at least 50 percent within the three year period beginning on the date of enactment of this section;

(2) Implementation of schedules which provide a systemwide average speed of at least 50 miles per hour, and which can be adhered to with a degree of reliability and passenger comfort;

(3) Improvement of the ratio of revenues to operating expenses, with the goal of coverage of at least 44 percent of operating expenses, excluding depreciation, from revenues by the end of Fiscal Year 1982 and 50 percent by the end of Fiscal 1985;

(4) Improvement of the feasibility of State-subsidized service through the use of technical assistance panels to coordinate, plan, and implement such service;

(5) Encouragement of rail carriers to assist in improving intercity rail passenger service; and

(6) General improvement of Amtrak's performance through comprehensive, systematic operation programs and employee incentives.

1979 Act, supra note 110, § 102.
General Accounting Office to study ways to eliminate Amtrak’s increasing debt to the federal government. At the same time, however, Congress recognized that Amtrak could contribute to energy conservation by providing energy-efficient passenger transportation and by serving as an alternative system of transportation for use in emergencies.

The election of Ronald Reagan as President and the Republican takeover of the Senate in 1980 accelerated the trend toward fiscal conservatism. The new Administration was openly hostile to Amtrak. David A. Stockman, a Representative from Michigan who had opposed Amtrak funding, became Director of the Office of Management and Budget. Reagan’s first Secretary of Transportation was Drew Lewis, also an Amtrak critic.

In 1981, the Reagan Administration proposed to reduce Amtrak’s budget to a level which would permit operations on the Northeast Corridor only. This proposal generated a national political outcry. Governors and senators from several western states lobbied hard to preserve long-haul trains such as the Chicago-Seattle “Empire Builder” and the Chi-

112. Id. at § 129; GEN. ACCTING. OFFICE, ALTERNATIVES FOR ELIMINATING AMTRAK’S DEBT TO THE GOVERNMENT (March 28, 1980).
113. Congress amended the findings section to read: “[A]nd that rail passenger service offers significant benefits in public transportation for the safe movement of passengers with minimum energy expenditure and represents a significant national transportation asset in time of national emergency or energy shortage.” Id. at § 102.
114. David A. Stockman was one of several Representatives who joined in a “Minority Report” to the Amtrak Improvement Act of 1978. The essence of this report is reflected in the following paragraph: Unfortunately, this bill seems determined to simply throw more money at Amtrak as it rolls to what appears to be a disastrous destination. The time has come to vote against this bill or any other legislation which prolongs the life of Amtrak for the following reasons:

1. Amtrak has failed;
2. Amtrak costs the taxpayers too much;
3. Amtrak provides no public benefit;
4. The freeze in this particular bill guarantees another 18 months of extravagant waste; and
5. The bill in effect prohibits even the Secretary of Transportation from taking off a single Amtrak train, now or in the future.

115. Transportation Secretary Drew Lewis, who has spoken out strongly in favor of slashing Amtrak operations has become a new interim member of the National Railroad Passenger Corporation’s 13 member board, with six other officials of the Department of Transportation. . . . Mr. Lewis has said that long-distance trains are unnecessary and a “rip-off” of the taxpayer. N.Y. Times, Sept. 15, 1981, at A24, col. 3.
116. See AMTRAK, ANNUAL REPORT 1981 at 3: “Unfortunately, 1981 saw the company endure the most severe conflict in our decade-long existence. Proposed federal budget reductions threatened an overnight shrinking of the national, intercity passenger rail system to a Northeast-only operation.”
cago-San Francisco "California Zephyr.""\textsuperscript{117} Despite Administration pressure to reduce Amtrak's funding to $600 million, Congress kept the authorization at $735 million for 1982.\textsuperscript{118} By June 21, 1982, a year after the confrontation began, Business Week magazine concluded that "unexpected public support for long-distance passenger trains, combined with the clout of powerful legislators, preserved all but two short routes."\textsuperscript{119}

The Amtrak Improvement Act of 1981\textsuperscript{120} reflected a compromise between advocates of preserving the system and those who sought to eliminate it. Congress again amended the "findings" section of the Rail Passenger Service Act. Although Congress still found that the public convenience and necessity required rail passenger service, such service had to be "cost-efficient" and was required only "to the extent that the Corporation's budget allows."\textsuperscript{121} The 1981 Act gave Amtrak additional economic and operational goals,\textsuperscript{122} and called for the NRPC's best business

\textsuperscript{117} Karr, Derailed Cutbacks: As Congress Comes to the Rescue, Amtrak Envisions the Best Passenger Train Service in its History, Wall St. J., June 25, 1981 at 50, col. 1.

\textsuperscript{118} 1981 Act, supra note 89, at § 1185. Funding levels of $735,000,000 for Fiscal Year 1981 and $788,000,000 for Fiscal Year 1982 were authorized.

\textsuperscript{119} Amtrak Gets on the Right Track, Bus. Week 99 (June 21, 1982).

\textsuperscript{120} 1981 Act, supra note 89; see Guess, supra note 55, at 391.

\textsuperscript{121} Section 1171. Section 101 of the Rail Passenger Service Act (45 U.S.C. 501) is amended to read as follows:

(a) The Congress finds that the public convenience and necessity require that the National Railroad Passenger Corporation provide, to the extent that the Corporation's budget allows, modern, cost-efficient and energy-efficient intercity railroad passenger service between the crowded urban areas and other parts of the country; that rail passenger service can help in alleviating the overcrowding of airways, airports and highways; and that to the maximum extent feasible travelers in America should have the freedom to choose the mode of transportation most convenient to their needs.

1981 Act, supra note 89, § 1171.

\textsuperscript{122} (1) Exercise of the Corporation's best business judgement in taking actions to minimize Federal subsidies, including increasing fares, increasing revenues on food service, improving its contracts with operating railroads, reducing management costs, and increasing employee productivity.

(2) Encouragement of State, regional, and local governments and the private sector to share the costs of operating rail passenger service, including the costs of operating stations and other facilities, in order to minimize federal subsidies.

(3) Improvement of the number of passenger miles generated systemwide per dollar of Federal funding by at least 30 percent within the two-year period beginning on the effective date of the Amtrak Improvement Act of 1981.

(4) Elimination of the deficit associated with food and beverage services by September 30, 1982.

(5) Implementation of strategies to achieve immediately maximum productivity and efficiency consistent with safe and efficient service.

(6) Operation of Amtrak trains, to the maximum extent feasible, to all station stops within 15 minutes of the time established in public timetables for such operation.

(7) Development of service on rail corridors subsidized by states or private parties or both. Id., § 1172. This section also called for increased system-wide average speeds of 60 miles per hour; both intercity and commuter services; coordination among the various users on the corridor, and Amtrak's maximization of the use of its resources.

\textit{Id.}
judgment to reduce the need for federal subsidies.\textsuperscript{123} Since the passage of the 1981 Act, Amtrak has undertaken concentrated efforts to reduce its costs,\textsuperscript{124} evidently seeing economical operations and reduced federal subsidies as the key to survival. In 1981, Amtrak negotiated new contracts with its operating unions on the Northeast Corridor.\textsuperscript{125} Railroads have traditionally suffered from high labor costs and low productivity because compensation is paid on a formula for distance traveled rather than for hours of work performed, and work-rules have perpetuated unproductive practices.\textsuperscript{126} The 1981 contracts replaced the traditional system with hourly pay and time-and-a-half for overtime, with smaller pay increases, changes in work-rules, reductions in overhead, and incentives for on-time performance.\textsuperscript{127} In 1986, Amtrak began directly hiring its train and engine crews outside the Northeast Corridor under similar contracts, for an estimated savings of $20-30 million per year.\textsuperscript{128}

Amtrak has also undertaken measures to use its assets more productively to generate additional revenues.\textsuperscript{129} These "revenue enhancement measures" have included: using Amtrak maintenance shops at Beech Grove, Indiana to manufacture subway cars for urban transit sys-

\textsuperscript{123} Id. § 1172(2)(1).
\textsuperscript{126} Thoms, supra note 9, at 2-3, described the system of work-rules in effect on most railroads: Faced with declining membership and what they believed to be management's disregard for safety in an industry in retrenchment, the operating unions have striven for as full employment as possible, although the average wage of a railway worker, compared to his counterpart in industry, is not overly great. Pay is based on a complex formula of miles and hours, which penalizes the junior brakeman on long, slow freights and work trains, and rewards the senior conductor on the passenger limited:

This pay is based upon work rules that have been in force since 1919. For engine crews, the rule reads: 'one hundred miles or less (straightaway or turnaround) . . . shall constitute a day's work; miles in excess of one hundred will be paid for at the mileage rate provided. For conductors and trainmen a day's work is one hundred and fifty miles or less (straightaway or turnaround). Engine crews and train crews alike are paid overtime on a speed basis of 20 miles per hour computed continuously from the time required to report for duty until released at the end of the last run.'

\textsuperscript{127} Developments in Industrial Relations, 105 MONTHLY LAB. REV. 54 (1982).
\textsuperscript{128} Amtrak, Annual Report 1986 at 4. See also: Amtrak Will Employ Its Own Crews, Railway Age March 1986, at 64.
tems; real estate development of Amtrak-owned land in urban areas; cogeneration of electricity and steam for Amtrak’s use and for sale to outside customers at a new plant in New Haven, Connecticut, and a fiber optics communications cable project with MCI Communications. Amtrak and MCI agreed to run this cable along the Northeast Corridor right-of-way from New York to Washington. It provides Amtrak with its own telecommunications line and surplus capacity for sale to outside customers.

Since 1981, Amtrak has initiated very few new routes. One innovation has been the revival of "Auto-Train" service from the Washington, D.C. area to Florida. Amtrak purchased the equipment from the bankrupt Auto-Train Corporation and began operating the service in October, 1983. Another innovation has been the resumption of service to Cape Cod for the first time since 1964.

In July, 1982, W. Graham Claytor, Jr. became Amtrak’s fourth president. Claytor has emphasized the need for cost reduction and increases in productivity. The 1979 Act required that Amtrak achieve a ratio of 50 percent of its costs covered by revenue by 1985. Amtrak achieved this ratio in 1982, three years ahead of schedule. Claytor has declared that Amtrak will continue to seek improvements in its revenue-to-cost ratio, which stands at .62 in 1986. Reduction of costs not covered by revenue means reduction of the federal subsidy required. Economical operations, rather than expansion of the system, appears to be Amtrak’s principal objective at the present time.

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130. AMTRAK, ANNUAL REPORT 1984 at 6.
133. AMTRAK, ANNUAL REPORT 1983 at 14; AMTRAK, ANNUAL REPORT 1984 at 8.
134. AMTRAK, ANNUAL REPORT 1986 at 7; see also Hopes Rise for a New York Rail Link to Cape Cod, N.Y. TIMES, Jan. 19, 1986, at A34, col. 4; Rail Service to Cape Has Caught On, N.Y. TIMES, Aug. 3, 1986, at 38, col. 1.
137. 1979 Act, supra note 110, § 103(a): Improvement of the ratio of revenue to operating expenses, with the goal of coverage of at least 50 percent of operating expenses, excluding depreciation, from revenues by the end of Fiscal Year 1985.
138. "Our success in this effort can best be measured by our revenue to cost ratio, the percentage of total operating costs covered by our revenues. By the end of FY 82 [Fiscal Year 1982], we had surpassed a revenue to cost ratio of .50. Congress had directed that this target be achieved by FY 85, yet we were able to reach it a full three years ahead of schedule." AMTRAK, ANNUAL REPORT 1983 at 4.
139. AMTRAK, ANNUAL REPORT 1984 at 3; AMTRAK, ANNUAL REPORT 1986 at 5.
1. **LEGISLATION**

The Rail Passenger Service Act, as amended, remains Amtrak's organic statute. The Amtrak Improvement Act of 1981 is the most recent modification of the original statute. The Congressional "findings" now emphasize both economic efficiency as well as attainment of social goals. Amtrak's operations must be both cost-efficient and energy-efficient. Congress finds that such service will help alleviate the overcrowding of airways, airports and highways and will provide travelers with freedom of choice among modes of transportation. Congress also finds that rail passenger service is important to the viability of major urban areas and to the national goal of energy conservation and energy self-sufficiency. Finally, Congress declares the Northeast Corridor to be a "valuable national resource" to be used by passenger, commuter and freight service.

Congress has provided specific managerial goals for Amtrak. The NRPC is directed to use its best business judgment to reduce the need for federal subsidies by increasing its fares and other revenues. Amtrak must improve the number of passenger-miles generated by the system, eliminate the food and beverage service deficit, operate its trains within 15 minutes of published schedules and maintain a system-wide average speed of 60 miles per hour. The NRPC is directed to maximize the productivity of its resources, employees, facilities and real estate.

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141. 1981 Act, supra note 89.
142. 45 U.S.C. § 501(a) supra note 121.
143. Id.
144. Id.
145. Id.
147. Id.
154. 45 U.S.C. § 501(a)(14) (1982); supra note 122: Amtrak's maximization of the use of its resources, including the most cost-effective use of employees, facilities, and real estate. Amtrak is encouraged to enter into agreements with the private sector and undertake initiatives which are consistent with good business judgement and designed to maximize its revenues and minimize Federal subsidies.
Amtrak remains a private corporation as a matter of law.\textsuperscript{155} It is to be managed as a for profit corporation, a formulation which recognizes little likelihood of profitability but seeks to impose market forces as a source of economic discipline.\textsuperscript{156} Amtrak's common stock is held by four railroads, and its preferred stock is held by the United States government.\textsuperscript{157}

The NRPC has the power to operate intercity passenger trains, commuter service, express (package) service, auto-ferry service, and mail service.\textsuperscript{158} It may provide these services directly (using its own employees, equipment and right-of-way) or indirectly (by contracting with private railroads).\textsuperscript{159} However, the statute instructs Amtrak to "directly operate and control all aspects of its rail passenger service."\textsuperscript{160} Since 1973, Amtrak has had the power to acquire property by eminent domain, except that it may not exercise this right against the property of other railroads where the property could be acquired otherwise.\textsuperscript{161}

Amtrak has certain rights under the Interstate Commerce Act as modified by the Rail Passenger Service Act. Amtrak is deemed a common carrier by rail within the meaning of the Interstate Commerce Act, but it is exempt from provisions relating to the regulation of rates, fares and charges; the abandonment or extension of lines used solely for passenger service; regulation of routes and services; and the issuance of securities.\textsuperscript{162} Amtrak is, however, subject to Interstate Commerce Act

\textsuperscript{155} There is authorized to be created a National Railroad Passenger Corporation. The Corporation shall be operated and managed as a for profit corporation, the purpose of which shall be to provide intercity and commuter rail passenger service, employing innovative operating and marketing concepts so as to fully develop the potential of modern rail service in meeting the Nation's intercity and commuter passenger transportation requirements. 45 U.S.C. § 541 (1982).

\textsuperscript{156} The 1978 Act amended section 301 of the 1970 Act "to conform the law to reality, providing that Amtrak shall be 'operated and managed as' a for profit corporation. This amendment recognizes that Amtrak is not a for profit corporation." 1978 Act, supra note 103, § 9; 1978 Act, 1978 Act. Leg. Hist., supra note 114, at 2323.

\textsuperscript{157} Railroads holding common stock are the Burlington Northern, the Chicago-Milwaukee-St. Paul & Pacific, Penn Central, and the Grand Trunk Western. THOMS, supra note 9, at 52. See 45 U.S.C. 45 § 544(a). The 1981 Act required Amtrak to issue to the Secretary of Transportation "a sufficient number of shares of preferred stock to equal, to the nearest whole share, the amount of funds appropriated by Congress for capital acquisitions or improvements between October 30, 1970, and September 30, 1981. Further shares must be issued for future appropriations. 1981 Act, supra note 9, § 1175; 45 U.S.C. § 544(c)(1) and (2).


\textsuperscript{159} Id.

\textsuperscript{160} "Insofar as practicable, the Corporation shall directly operate and control all aspects of its rail passenger service." Id.


\textsuperscript{162} The Corporation shall be deemed a common carrier by railroad within the meaning of section 1(3) of the Interstate Commerce Act and shall be subject to all provisions, including the provisions of Section 22(1) of the Interstate Commerce Act other than those pertaining to—
provisions relating to safety and employee relations.\footnote{163} Federal preemption applies to state laws relating to rates, routes and services, state full-crow laws and state laws restricting auto-ferry service.\footnote{164} The Interstate Commerce Commission has jurisdiction to hear complaints from aggrieved motor carriers that Amtrak engaged in predatory pricing on the routes in which it competes with them.\footnote{165} Since 1981, Amtrak has been exempt from state and local taxes.\footnote{166} Amtrak employees and the employees of contracting railroads are covered by the Rail Passenger Service Act's provisions for labor protection.\footnote{167} The NRPC is authorized to contract with railroads for the use of their rights-of-way and other facilities, and such contracts must have penalties for untimely performance.\footnote{168} The Interstate Commerce Commission may set terms and compensation for services and the use of rights-of-way if Amtrak and the private railroads are unable to agree.\footnote{169} Railroads are obliged to give Amtrak trains preference over freight trains in the use of rights-of-way unless the Secretary of Transportation orders otherwise.\footnote{170} States, groups of states, regional or local agencies or other persons may contract with Amtrak to provide service if the requesting party is willing to contribute to the costs of the service.\footnote{171}

\begin{enumerate}
\item regulation of rates, fares, and charges;
\item abandonment or extension of lines of railroads utilized solely for passenger service, and the abandonment or extension of operations over such lines of railroads, whether by trackage rights or otherwise;
\item regulations of routes and service and, except as otherwise provided in this Act, the discontinuance or change of passenger train service operations; and
\item the issuance of securities or the assumption of any obligation or liability with respect to the securities of others.
\end{enumerate}

2 U.S.C. § 546(a) (1983); see Thoms, Clear Track for Deregulation, 12 TRANSP. L. J. 183, 198 (1982): “Since Amtrak is thought of as a proprietary program, it is a bit unusual to think of the Rail Passenger Service Act as a deregulation law. But inasmuch as it took passenger trains out from under I.C.C. regulation, it can be seen as the first of the transportation deregulation bills of the 1970s.”

\footnote{165} \textit{id}.
\footnote{166} Notwithstanding any other provision of law, the National Railroad Passenger Corporation ("the Corporation") shall be exempt from any taxes or other fees imposed by any State, political subdivision of a State, or local taxing authority which are levied on the Corporation, or any railroad subsidiary thereof, from and after October 1, 1981, including such taxes and fees levied after September 30, 1982: Provided, however, that notwithstanding any provision of law, the Corporation shall not be exempt from any taxes or other fees which it is authorized to pay as of the date of the enactment of this provision. 45 U.S.C. § 546(b) (1983). (enacted Sept. 10, 1982; Pub. L. No. 97-257, Title I, Ch. XII in part, 96 Stat. 852).
\footnote{169} \textit{id}.
\footnote{171} 45 U.S.C. § 563 (1983). The state, agency, or person must submit a statement that it agrees to pay 45 percent of the short term avoidable costs and 50 percent of the associated
Amtrak's principal source of funding is an annual appropriation from Congress. The Secretary of Transportation is authorized to provide loan guarantees of up to $930 million.

The Secretary of Transportation is also directed to consult with Amtrak to develop a method of evaluating new rail passenger service corridors for development. The Secretary must determine which corridors have the greatest potential for attracting riders, reducing energy consumption and providing cost-effective transportation.

2. AMTRAK OPERATIONS

Amtrak currently operates a route system of 24 thousand miles, serving 491 stations including Montreal and Toronto, Canada. Operations in 1986 totaled 29 million train miles. A map of the current route system follows as Appendix. Of the stations served, 94 have no intercity airline service, 52 have no intercity bus service, and 25 have neither airline nor bus service.

Amtrak's operating fleet in 1986 consisted of 291 locomotives, both diesel and electric (average age: 8 years) and 1,664 passenger cars. Amtrak’s ridership for 1986 was 20.3 million passengers. These passengers traveled 5,013 million passenger miles. Ridership has been stable for several years, in the vicinity of 20 million passengers per year.

When compared with other modes of transportation, Amtrak's ridership initially seems insignificant. The Congressional Budget Office estimated that in 1981, Amtrak's share of all intercity passenger miles was capital cost for the first year of operation, and 65 percent of the short term avoidable costs and 50 percent of the associated capital costs in each year of operation thereafter.

175. AMTRAK, ANNUAL REPORT 1986 at 23.
176. id.
177. AMTRAK, AMTRAK RESPONDS TO WRITTEN TESTIMONY OF OMB, Submitted to the Senate Committee on Commerce, Science, and Transportation, May 2, 1985 (available from Amtrak); [hereinafter cited as AMTRAK RESPONSE TO OMB].
178. Welty, Amtrak Under Siege, 186 Ry. Age 37,40 (1985); cf. Amtrak Reauthorization: Hearings Before the Subcomm. on Surface Transportation of the Senate Comm. on Commerce, Science and Transportation, 99th Cong., 1st Sess. 74 (1985) (written statement of W. Graham Claytor, Jr., President of Amtrak) [hereinafter cited as 1985 Senate Transportation Subcomm. Hearings]: "One hundred and sixty-one communities served by Amtrak will have no air service upon termination of the present local commuter air services subsidy. Fifty two Amtrak-served communities have no intercity bus service. Twenty-nine Amtrak-served communities have neither air nor bus service."
179. AMTRAK, ANNUAL REPORT 1986 at 23.
180. id.
181. id.
less than one percent. However, this market share is best understood if it is remembered that 85 percent of all intercity passenger miles were traveled by private automobile, and only 15 percent were traveled by all common carriers together, including airlines, buses and Amtrak. Of the common carrier market, the Congressional Budget Office estimated that in 1982 Amtrak’s share was approximately 2 percent, as compared with 12 percent for intercity buses, and 86 percent for airlines.

Amtrak’s response to these estimates is that they reflect limitations imposed by the Department of Transportation and Congress on Amtrak’s route system and the limited size of its operating fleet, which prevent the public from choosing Amtrak as an alternative. In addition, any one carrier’s share of the transportation market is small. When compared to the major airlines, Amtrak in 1986 was the seventh largest carrier of passengers in the United States.

The Northeast Corridor is Amtrak’s most successful market. In 1984, of Amtrak’s total ridership of 19.9 million passengers, 10.8 million rode the Northeast Corridor route. For the first three months of 1986, Amtrak

183. Id.
184. Id.
185. We have never believed that our mandate was to grow as large as the U.S. airline industry. In fact, in recent years we have attempted to maximize revenues and not ridership, in order to limit our dependence on federal funding. Our 24,000 mile route structure, as designed by the Department of Transportation in 1971 and as modified by Congress in 1979 and 1981, is quite modest in comparison to other modes. In many areas, because of budgetary constraints and lack of equipment, we can provide only limited service. Amtrak Response to OMB, supra note 177, at 5, 10. See also supra note 69 for table comparing Amtrak’s operating fleet to those of other national passenger railroads.
186. Passenger Ranking

<table>
<thead>
<tr>
<th>RANK</th>
<th>CARRIER</th>
<th>PASSENGERS (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United</td>
<td>46,021</td>
</tr>
<tr>
<td>2</td>
<td>American</td>
<td>42,295</td>
</tr>
<tr>
<td>3</td>
<td>Delta</td>
<td>36,398</td>
</tr>
<tr>
<td>4</td>
<td>Eastern</td>
<td>38,997</td>
</tr>
<tr>
<td>5</td>
<td>Piedmont</td>
<td>21,431</td>
</tr>
<tr>
<td>6</td>
<td>US Air</td>
<td>20,691</td>
</tr>
<tr>
<td>7</td>
<td>Amtrak</td>
<td>20,328</td>
</tr>
<tr>
<td>8</td>
<td>Republic</td>
<td>19,282</td>
</tr>
<tr>
<td>9</td>
<td>Continental</td>
<td>17,138</td>
</tr>
<tr>
<td>10</td>
<td>Trans World</td>
<td>16,152</td>
</tr>
</tbody>
</table>

*Domestic Operations, scheduled service

trak carried 306,300 passengers between New York and Washington, which was 32 percent of the total rail and air traffic on that route, according to the U.S. Department of Transportation.188 Eastern Airlines, operator of the largest air shuttle service between the two cities, carried 237,240 passengers, or 24.7 percent of total passengers.189

For Fiscal Year 1987, Amtrak’s federal subsidy is $602 million, down from a high of 896.3 million in 1981 and 716.4 million in 1984.190 Amtrak argued its subsidy represented .07 of one percent of the federal budget for Fiscal Year 1986, and thus disputes the Administration’s claim that federal spending for Amtrak contributes significantly to the budget deficit.191 Amtrak also claims that its need for federal funding has declined steadily since 1981.192

Amtrak attributes its ability to reduce its need for federal subsidies to successful efforts to reduce costs and increase revenues, as shown by the revenue-to-cost ratio. For 1986, Amtrak reported a revenue-to-cost ratio of .62, up from .58 during Fiscal Year 1985 and .53 in 1982.193 As this ratio improves, Amtrak’s need for federal subsidies is reduced.

Based on these data, Amtrak’s management contends that it has improved both its financial and operating performance, and that it has conformed to the standards imposed by Congress in the Rail Passenger Service Act as amended.194 From the passenger’s perspective, one needs only to remember the “bad old days” of the early 1970s (with battered passenger cars, unreliable locomotives, crumbling stations and numerous other woes) to realize that Amtrak has made considerable improvements in the experience of traveling by train.

III. AN ASSESSMENT OF THE PUBLIC BENEFITS PROVIDED BY AMTRAK

In arguing that Amtrak’s funding should be terminated, former

\[\text{FY 81} \quad \text{FY 82} \quad \text{FY 83} \quad \text{FY 84} \quad \text{FY 85} \quad \text{FY 86} \quad \text{FY 87} \quad \text{FY 88}\]

\[\begin{align*}
1124 & \quad 870 & \quad 766 & \quad 786 & \quad 713 & \quad 684 & \quad 656 & \quad 632 \\
\end{align*}\]

\textit{SOURCE: AMTRAK RESPONSE TO OMB, supra note 177, at 27. (Calculated in constant dollars of purchasing power)}


Budget Director David A. Stockman declared that Amtrak produces no significant public benefits. 195 The Rail Passenger Service Act as amended makes clear which benefits Congress hoped to gain from Amtrak: 196 provide a balanced system of transportation with freedom of choice for the traveler; reduce congestion on highways and the overcrowding of airports and airways; move passengers safely; and help achieve national goals of energy conservation and energy self-sufficiency. Since 1981, Amtrak has been directed to use its best business judgment to minimize federal subsidies while seeking to achieve these other objectives. 197

Given these objectives, how well has Amtrak performed? One way to answer that question is to examine studies which have evaluated Amtrak’s performance. Three studies, all of them critical of Amtrak, will be considered here. The most thorough and detailed study was prepared by Frank Mulvey, an economist at Northeastern University for the National Transportation Policy Study Commission in 1977. 198 Although Mulvey acknowledged that Amtrak “for better or worse, is here to stay for the foreseeable future,” 199 he concluded that Amtrak was not a good public investment and that if Congress was determined to preserve it, “efforts are needed to make that service more cost-effective than it is today.” 200 The second study was prepared by George W. Hilton, a professor of economics at the University of California at Los Angeles, and was published by the American Enterprise Institute. 201 Hilton concluded that Amtrak had been unsuccessful by any standard, and that rail passenger service should be allowed to disappear. 202 Finally, the Congressional Budget Office produced a study in 1982 which concluded that Amtrak’s contributions to social goals were minimal, and that therefore, large federal subsidies were difficult to justify. 203

These studies provide data to answer the question of how well Amtrak has provided the benefits Congress intended. By using three studies which are critical of Amtrak, any pro-Amtrak bias should be controlled, so that the results of this study will be more reliable. A weakness of this approach is that each of the three studies considered a different list of

195. 1985 Senate Transportation Subcomm. Hearings, supra note 178, 15-50 (oral and written testimony of David A. Stockman); see supra note 114; see also Stockman Presses Senators to End Amtrak Subsidy, supra note 3.
197. Id. § 501a.
198. MULVEY, supra note 7.
199. Id. at 42.
200. Id. at 192.
201. HILTON, supra note 7.
202. Id. at 5-6, 62.
203. CBO Study, supra note 7.
purported benefits, and therefore it is impossible to see how each analyst would rate Amtrak’s performance in each category. The benefits to be examined are: alleviating highway and airport congestion; providing safe transportation; providing energy-efficient transportation; providing an alternative system of transportation; and achieving economical operations.

A. ALLEVIATING AIRPORT AND HIGHWAY CONGESTION

Professor Mulvey, in his 1977 study, was the only analyst to consider Amtrak’s contribution to alleviating airport and highway congestion, despite the fact that this has been listed as one of the objectives for Amtrak since the Rail Passenger Service Act was first enacted in 1970.204 Neither Professor Hilton nor the Congressional Budget Office addressed this issue.

1. AIRPORT CONGESTION

Amtrak’s contribution to reducing airport congestion was considered significant in the Northeast Corridor but not in other parts of the system.205 This was because only in the Northeast Corridor was the service frequent enough to compete with airlines. Airport congestion was estimated by considering the number of aircraft delays that are prevented when Amtrak provides an alternate means of transportation.206 Using a regression analysis model developed by the Federal Aviation Administration, Mulvey calculated the number of takeoffs and landings that could be eliminated if passengers traveled by Amtrak instead of airplane, and then estimated the decrease in delays due to reduced congestion.207 Mulvey assumed that passengers in 1977 valued their time at $10.00 per hour (because many Northeast Corridor passengers travel on business). He then calculated that the annual benefit of reducing aircraft delays due to Amtrak was slightly over $1.5 million for 1976.208

Projecting this data into 1990, Amtrak’s Northeast Corridor service appeared to make a significant contribution to reducing congestion and delays.209 If Northeast Corridor airports remained at the same capacity but demand for air travel increased, congestion and delays could be expected to increase. However, if Amtrak’s Northeast Corridor service remained in operation, the number of delays would be reduced by 64,808

205. Mulvey, supra note 7, at 83, 93.
206. Id. at 85: "In order to estimate the effect of Amtrak services, it is necessary to forecast aircraft delays due to increased traffic if Amtrak’s service did not exist."
207. Id. at 85-88.
208. Id. at 88.
209. Id. at 172.
annually, for an estimated savings of $190.4 million per year.\footnote{210} If airport capacity along the corridor expanded by 50 percent, the reduction in delay would be less, but still significant. If Amtrak continued to divert passengers from airlines while airport capacity expanded by 50 percent, then 13,838 fewer flights would be delayed each year, for an annual savings of $40.6 million dollars.\footnote{211}

A program to shift air passengers to high-speed rail service could therefore prove cost-effective. Because airport expansion is very costly, the savings realized through continuing Amtrak service could be significant.\footnote{212} Thus, Amtrak makes a positive social and economic contribution by reducing airport and airway congestion along the Northeast Corridor.\footnote{213}

2. **HIGHWAY CONGESTION**

Mulvey confined his analysis of highway congestion to the Northeast Corridor.\footnote{214} He observed that highway congestion is a problem which is not exclusively caused by intercity traffic, but results primarily from local commuter traffic. He defined the benefit of reduced highway congestion as reduced travel time for people who drive.\footnote{215} The more travelers are diverted from automobile to Amtrak, the more congestion is reduced, and the less delay there is for travelers. In 1976, there were 60 billion automobile passenger miles driven in the Northeast Corridor region.\footnote{216} Amtrak diverted approximately 1 billion passenger miles, or 2 percent. Measuring the benefit of reduced highway congestion is difficult because the benefit to the traveler of reduced delay may not be perceived.\footnote{217} However, assuming that the traveler does perceive a benefit, and values his time at $3.00 per hour, Mulvey calculated the aggregate benefit due to Amtrak ranged between $10 million and $15 million annually.\footnote{218}

In forecasting the situation in 1990, Mulvey considered to extent to which the highway system would be expanded. If no highway expansion were to take place, the benefit of diverting drivers to Amtrak could reach

\footnote{210. id. at 174.}
\footnote{211. id. at 174.}
\footnote{212. id. at 174.}
\footnote{213. An additional variable which future studies may wish to consider is the location of the airports under study. Some airports are located in areas which limit the potential for expansion (e.g., LaGuardia in New York City, or Washington National in the District of Columbia) almost regardless of cost. Other airports may have greater ability to expand at a more reasonable cost.}
\footnote{214. *MULVEY*, supra note 7, at 89.}
\footnote{215. id. at 89.}
\footnote{216. id. at 92.}
\footnote{217. id. at 92.}
\footnote{218. id. at 92.}
$200 million per year. If highways were expanded by 50 percent, the value of the time saved could be estimated at $82 million per year, and if highway capacity were doubled, at $71 million per year. Mulvey noted several factors which would limit the savings which could be realized. Although he observed that "there do appear to be important savings from NEC auto traffic congestion relief by Amtrak in 1990," he questioned whether Amtrak was the best way to achieve these benefits.

**B. PROVIDING SAFE PASSENGER TRANSPORTATION**

Congress recognized that Amtrak could provide safe transportation to the traveling public. Professor Mulvey acknowledged that passenger rail service is very safe, but noted that all common carrier systems (bus, airline, and rail) have excellent safety records. Most travel-related accidents involved private automobiles.

Using 1976 as a test year, Professor Mulvey estimated that because passengers took Amtrak instead of driving, 33 lives were saved. If each fatality were valued at $300,000, the savings realized by preventing these deaths could be valued between $10 million and $33 million for 1976. When other costs of accidents were included (e.g., lost time

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219. *Id.* at 176.
220. *Id.* at 176.
221. Mulvey noted possible limitations on the savings:
   1. the estimated value for the traveler's time in 1990, which may be distorted by inflation;
   2. the assumption that all traffic uses the Interstate 95 highway network, which may not be true in 1990, and
   3. the time saved may be imperceptible to the traveler. *Id.* at 176.
222. *Id.* at 177.
223. *Id.* at 177.
224. The safe transportation of passengers was expressly recognized in the Amtrak Reorganization Act of 1979: "... rail passenger service offers significant benefits in public transportation for the safe movement of passengers...." 1979 Act, *supra* note 110, § 102. This reference to the safe transportation of passengers was deleted when Congress amended the "Findings" in the Amtrak Improvement Act of 1981. 1981 Act, *supra* note 89, § 1171.
227. *Id.* at 63.
from work, medical expenses, insurance administration, and property
damage) an additional savings of $18 million was realized.\textsuperscript{228} Therefore,
the total 1976 savings for Amtrak’s diversion of passengers could be valued
at between $28 and $51 million.\textsuperscript{229}

Projecting this trend to 1990, Mulvey estimated that Amtrak would produce savings between $38.5 million and $132.2 million for reduced fatalities, and $50 million for other accident-related costs.\textsuperscript{230} Thus, the total contribution would be between $88.5 million and $188.2 million for 1990.

Although Amtrak clearly seemed to make a positive contribution to safe travel, Mulvey questioned whether Amtrak was the most cost-effective way of promoting safety.\textsuperscript{231} He suggested that the same money spent on highway safety or improving the crash-worthiness of automobiles might produce greater savings.

Professor Hilton agreed that Amtrak is an extremely safe form of transportation, and cited fatality rates for rail accidents even lower than those used by Mulvey.\textsuperscript{232} However, Hilton argued that Americans have been willing to take the risks associated with automobile travel for nearly 40 years.\textsuperscript{233} If people are willing to accept the greater risks, then in Hilton’s view, providing safer transportation by preserving rail passenger service is unnecessary and uneconomical.

Thus, two of Amtrak’s critics acknowledged that Amtrak provides a benefit to society in the form of safe passenger transportation, although they disputed that Amtrak was an appropriate means to gain that benefit. The 1982 Congressional Budget Office study did not consider passenger safety as a potential benefit from Amtrak.\textsuperscript{234}

\section*{C. Energy Conservation}

The commonly-held belief that trains are relatively energy efficient as compared to other modes of transportation was reflected in a 1979 report by the Secretary of Transportation which was part of the legislative history of the Amtrak Reorganization Act of 1979:

\ldots it is widely recognized that with sufficient ridership levels and modern, state-of-the-art equipment, the passenger train is the most energy-efficient of all modes. The engineering characteristics of the train are superior to those

\textsuperscript{228} Id. at 64.
\textsuperscript{229} Id.
\textsuperscript{230} Id. at 158.
\textsuperscript{231} Id. at 64.
\textsuperscript{232} HILTON, supra note 7, at 54 (Table No. 16).
\textsuperscript{233} Id. at 53.
\textsuperscript{234} For a list of the variables considered, see CBO STUDY, supra note 7, at 9.
of other modes.\footnote{235} The Secretary’s report claimed that trains are superior because steel wheels on steel rails generate less friction than rubber tires generate on highways; because additional cars can be added to trains with little reduction of energy efficiency, and that a passenger train’s energy efficiency is more pronounced at higher speeds.\footnote{236}

Professor Mulvey suggested two qualifications to this optimistic view of the train’s energy efficiency. First, when comparing modes of transportation, one must consider the circuity of routes.\footnote{237} Rail lines are not always as direct as air routes or modern highways. Trains may have to travel more miles to reach their destinations than aircraft, buses, or automobiles. Therefore, although trains may be more efficient on a per-mile basis, if the route of the train is circuitous, some of the advantage may be lost. Second, long-haul trains (which include diner, sleeper, baggage, and lounge cars) are less energy efficient because the extra cars add weight without carrying additional passengers.\footnote{238}

Mulvey acknowledged that early studies of energy usage showed that the passenger train is second only to the intercity bus in energy conservation, and is significantly more efficient per passenger mile than aircraft or automobiles.\footnote{239} However, Mulvey noted that the early studies were conducted under laboratory conditions, which did not acknowledge the effect of grades on energy consumption.\footnote{240} Moreover, deteriorated plant and equipment, such as Amtrak possessed in the 1970s, further reduces energy efficiency. Finally, in the middle 1970s, Amtrak trains operated with low passenger loads.\footnote{241} When load factors are low, a train does not conserve as much energy because it is carrying empty seats instead of passengers. The intercity bus was considered more efficient than rail in all categories of service (corridor, short-haul, and long-haul).\footnote{242}

Using Amtrak’s estimates for energy consumption, if short-haul trains operated at 30 percent load factors and long-haul and corridor trains operated at 50 percent load factors, Mulvey estimated that Amtrak could save up to 53 million gallons of oil per year by diverting passengers from other modes.\footnote{243} Although savings in oil consumption could be realized, Mulvey contended that there are less costly ways to achieve the same

\footnotesize{\begin{itemize}
  \item 1979 ACT LEG. Hist., supra note 5, at 1200.
  \item Id. at 1200-1201.
  \item Mulvey, supra note 7, at 66; 1979 ACT LEG. Hist., supra note 5, at 1202.
  \item 1979 ACT LEG. Hist., supra note 5, at 1202.
  \item Mulvey, supra note 7, at 66.
  \item Id. at 66.
  \item Id. at 69.
  \item Id. at 71.
  \item Id. at 71-72.
\end{itemize}}
savings. Mulvey argued that if all Amtrak passengers were diverted to intercity buses, an additional 38.3 million gallons would be saved. Alternatively, full compliance with the 55 mile-per-hour speed limit for automobiles could save 2.5 billion gallons of oil per year.

Amtrak’s long-haul trains appeared to use as much energy as other means of transportation, and therefore, “Amtrak’s contribution to fuel conservation is effectively zero for long-distance travel.” Mulvey suggested that if short-haul trains (lacking the luxury service cars) were substituted, energy savings for the entire system would be significantly higher.

Looking to future Amtrak performance, if fuel costs were assumed to rise at 6 percent per year, the fuel savings in 1990 would be equivalent to $244 million per year. Mulvey concluded that the savings are small in light of Amtrak’s operating deficit and the capital expenditures required to bring about the savings.

Professor Hilton’s study did not consider the energy conservation issue in detail, and merely noted that the “passenger train is a large, heavy vehicle, which requires continual acceleration and deceleration, and therefore heavy energy inputs.” Hilton noted that intercity passenger trains require just over half the fuel per passenger-mile of aircraft, slightly more than automobiles, and nearly triple that of buses. It seems clear that Hilton was referring to long-haul trains, without considering the better performance of short-haul and corridor electric trains.

The 1982 Congressional Budget Office study reached similar conclusions as to Amtrak’s ability to save energy: that the intercity bus is the most efficient mode; that rail is more efficient than the automobile on the Northeast Corridor, but somewhat less efficient outside the Corridor; and that air travel is the least energy-efficient mode of all. The Congressional Budget Office also agreed with Mulvey that Amtrak’s Northeast Corridor service saves a small amount of energy, and more specifically, a small amount of petroleum. However, the Congressional Budget Office also agreed that the cost of achieving this small savings was disproportionate to the savings gained, and that investment in other forms of energy conservation measures would be more cost-effective.

244. Id. at 71-73.
245. Id. at 73.
246. Id. at 73.
247. Id. at 73.
248. Id. at 164.
249. HILTON, supra note 7, at 52.
250. Id. at 15.
251. CBO STUDY, supra note 7, at 14.
252. Id. at 15.
253. Id. at 16-17.
D. ALTERNATIVE SYSTEM OF TRANSPORTATION

Congress recognized the need for a "balanced system of transportation" and declared that travelers in America should have "freedom of choice" among modes.\(^{254}\) Several events have created the perception that Amtrak could serve as an alternative system of transportation for use in emergencies. During World War II, passenger trains were used extensively to move troops and their equipment.\(^{255}\) More recently, during fuel shortages in 1973-74 and 1979, Amtrak ridership increased significantly as people sought alternatives to their private cars and long gas lines.\(^{256}\) Rail ridership has also increased temporarily during airline and bus strikes.

Professor Mulvey's analysis did not evaluate Amtrak as an alternative transportation system. Professor Hilton observed that although Amtrak's ridership increased 20 percent during each of the fuel shortages, Amtrak's share of total intercity passenger travel is still so small as to be insignificant.\(^{257}\) The Congressional Budget Office concluded that during fuel shortages, the majority of passengers shifted from automobile to buses and that during strikes, passengers shifted from the affected industry to their private automobiles.\(^{258}\) The principal difficulty in relying on Amtrak in a transportation emergency is that the system has only limited carrying capacity and can serve only selected destinations.\(^{259}\) Using assumptions favorable to Amtrak, the Congressional Budget Office estimated that the maximum contribution that Amtrak could make would be 4 percent of the total demand for intercity common carrier service.\(^{260}\)

Turning to military uses for Amtrak during wartime, the Congressional Budget Office found that after World War II, the federal government spent billions to develop the Interstate Highway System and to aid the development of air transportation.\(^{261}\) Because these systems now exist, there is little reason to imagine rail service would be preferable during wartime. The Congressional Budget Office also observed that the usefulness of the rail passenger system depends on the condition of the right-of-way, which is too poor to accommodate passenger service in most of the United States.\(^{262}\)

\(^{255}\) HILTON, supra note 7, at 4.
\(^{256}\) Id. at 32.
\(^{257}\) Id. at 65.
\(^{258}\) CBO STUDY, supra note 7, at 18.
\(^{259}\) Id. at 18.
\(^{260}\) Id. at 19.
\(^{261}\) Id. at 19.
\(^{262}\) Id. at 19.
E. ECONOMIC EFFICIENCY

Amtrak has frequently been criticized for uneconomical operations, which have resulted in large federal subsidies and in failure to achieve profitability.\textsuperscript{263} However, when Amtrak was created, the 1970 Act did not establish specific financial goals for the Corporation. Instead, the 1970 Act provided that “the Corporation shall be a for profit corporation.”\textsuperscript{264}

This language is not without ambiguity. Did this mean that Amtrak was to exist only if it could operate at a profit? Or did Congress mean only that this was the form of business organization it chose to operate the national rail passenger system (as opposed to nationalization or federal subsidies to existing private railroad companies)?\textsuperscript{265} If profitability was required, within what time period was it to be achieved, and how was it to be defined? The 1970 Act was silent as to these matters.

The legislative history of the 1970 Act does not resolve the question of Congressional intent conclusively. In discussing the purpose of the 1970 Act, House Report 91-1580 stated:

The Corporation would be expected to revitalize rail passenger service in the expectation that the rendering of such service along certain corridors can be made a profitable commercial undertaking, particularly with new equipment or advanced vehicles.\textsuperscript{266}

Congress apparently recognized that not all corridors would be profitable. The same report also stated that Congress’ greatest concern was the preservation of some rail passenger service:

The basic purpose of this bill is to prevent the complete abandonment of intercity rail passenger service and to preserve a minimum of such service along specific corridors. . . . The overriding purpose of this legislation is to preserve and promote intercity rail passenger service. . . .\textsuperscript{267}

Taken together, this language shows that Congress was determined to preserve rail passenger service, and that this preservation was not dependent on the achievement of profitability.

By 1978, however, Congressional sentiment had changed. Notwithstanding the 1970 language discussed above, the legislative history of the Amtrak Improvement Act of 1978 declared that Congress had always in-

\textsuperscript{263} See, e.g., 1985 Senate Transportation Subcomm. Hearings, supra note 178, at 20: “What I am suggesting to the committee is that the economics of Amtrak are irredeemable. If you decide to maintain Amtrak, it should not be on the basis of any kind of illusion that it is close to breaking even, that things are improving every year, that if we string out the subsidy for another 4 or 5 years, maybe, eventually, it can go away.” (Remarks of David A. Stockman); see also, Semmens, Don’t Let Amtrak Con You, Reason 36 (May 1985).

\textsuperscript{264} 1970 Act, supra note 29, at § 301.

\textsuperscript{265} See THOMS, supra note 9, at 35-37.

\textsuperscript{266} 1970 ACT LEG. HIST., supra note 11, at 4735 (emphasis added).

\textsuperscript{267} Id. at 4735 (emphasis added).
tended for Amtrak to be profit-making enterprise. Demand ing "something more than a restructuring of the existing economically-flawed system," Congress amended the 1970 Act to provide that Amtrak should be "operated and managed as" a for profit corporation, recognizing that even if profitability were not immediately forthcoming, Amtrak should be subject to the discipline of market forces.

In 1979, following a year-long review of Amtrak’s operations, Congress made additional amendments to the 1970 Act. These amendments called for specific operating improvements and set a goal for improvement in financial performance. In 1981, Congress called for additional improvements in economic efficiency in amendments to the "Goals" section of the 1970 Act.

This review of Congressional enactments shows that over time, Congress developed standards for Amtrak’s financial performance. However, it is clear that Amtrak did not start with these criteria in place and fail to achieve them, as critics attempt to argue. Perhaps Congress initially thought that by creating Amtrak as a for profit corporation, it had given sufficient guidance. Even if that were true, however, Congress itself subsequently contributed to Amtrak’s failure to achieve profitability by directing it to continue to expand its services, and by continuing to increase federal expenditures. Moreover, the legislative history of the 1970 Act shows that Congress placed greater emphasis on preserving and promoting rail passenger service than on profitability, at least until 1978. Finally, Congress clearly never said, "Achieve profitability or be terminated," or "Achieve profitability by a certain date". Therefore, the argument that Amtrak did not conform to Congressional expectations as to profitability is unfounded because prior to 1979, there were no clear standards to express what Congress expected.

A meaningful review of Amtrak’s financial performance in light of Congressional expectations should begin no earlier than 1980, because that is when the standards enacted in 1979 first became applicable. More appropriately, a review should begin in 1982 because additional goals were set in the Amtrak Improvement Act of 1981. Such a review should attempt to apply the standards set in the 1979 and 1981 Acts to Amtrak’s performance since their enactment. Only then could a meaningful judgement be reached as to whether Amtrak has satisfied Congressional expectations.

268. 1978 Act Leg. Hist. supra note 116, at 2314: "When Congress passed the Rail Passenger Service Act of 1970 (Public Law 91-518), it fully expected establishment of a national passenger train system which would eventually operate on a for-profit basis".
269. Id. at 2315; 1978 Act, supra note 103, § 11.
270. 1979 Act, supra note 110, § 102; for text, see supra note 113.
271. 1981 Act, supra note 89; for text, see supra note 123.
The three studies of Amtrak considered here each based their assessments of Amtrak on data gathered before Congress enacted the specific financial and operational goals. Therefore, even if these studies accurately describe Amtrak as it was when the data were gathered, they should not be used to address the question of whether Amtrak currently complies with Congressional directives.

The 1982 Congressional Budget Office study comes the closest to providing data which can be useful here, because its coverage includes some data for 1980 and 1981. Looking at the period 1972-80, the Congressional Budget Office found that Amtrak lost money at an increasing rate; and therefore, its need for federal subsidies increased (by approximately 232 percent after inflation). The Congressional Budget Office calculated that in 1981, the average subsidy per passenger was $37.00. The crucial finding of this study was that "Amtrak's subsidy needs, under standard operating procedures, would continue to grow in future years even with no increase in services."

The Congressional Budget Office explained the pattern of increasing subsidy requirements by focusing on Amtrak's costs. Acknowledging that Amtrak had increased both revenues and ridership, the Congressional Budget Office found that Amtrak's costs during 1972-81 increased more rapidly than revenues (112 percent after inflation), although part of the increase was due to the expansion of the system by adding additional routes and services. Compared to other forms of passenger transportation, Amtrak had higher relative costs per passenger mile. In 1980, it cost Amtrak 25 cents per mile to move a passenger, while it cost bus companies 8 cents per mile and airlines 12 cents per passenger mile. Because Amtrak had to keep its fares competitive with buses and airlines to attract riders, the revenue received from passengers only covered a fraction of Amtrak's costs, and the balance had to be covered in the form of a federal subsidy.

The Congressional Budget Office isolated three factors which accounted for Amtrak's high costs. First, Amtrak's system-wide load factor in 1980 was only 48 percent (although it was admitted that

272. Mulvey, supra note 7; Hilton, supra note 7; CBO Study, supra note 7.
273. Mulvey's study included data from 1976; Hilton's study included data from 1978; and the CBO Study included data from 1981.
274. See, e.g., CBO Study, supra note 7 at 26.
275. Id. at 25-26.
276. Id. at 26.
277. Id. at 27.
278. Id. at 27.
279. Id. at 27.
280. Id. at 30.
281. Id. at 30.
particular trains were booked to capacity at peak seasons). Second, Amtrak suffered from high labor costs. These costs were explained by the fact that railway labor contracts were based on traditional work rules, which encouraged unproductive practices. Third, Amtrak suffered from high capital intensivity. High capital intensiveness was considered to be a characteristic of railroad passenger service in general, although the Congressional Budget Office felt that Amtrak could improve its capital use by using its existing stock of equipment more efficiently.

The Congressional Budget Office concluded that Amtrak’s ability to reduce its need for federal subsidies was limited. Neither raising revenues through higher fares, nor increasing load factors, nor reducing costs were considered sufficient to make a major impact on the need for federal subsidies. Conceding that this assessment was based on pessimistic assumptions, the Congressional Budget Office admitted that Amtrak could realize some savings through a combination of cost control measures. The most optimistic assumptions produced an estimate that Amtrak could reduce its Fiscal Year 1983 subsidy by $150 million, or 13 percent, from $1.13 billion to $980 million.

The Congressional Budget Office ultimately concluded that “the only effective course toward substantially reducing the system’s current deficit and subsidy levels appears to be the termination of services on those routes that are the most unprofitable.” The largest savings were to be realized through eliminating long-distance train service.

Recent developments demonstrate that Amtrak’s ability to reduce its dependence on federal subsidies has been greater than the Congressional Budget Office predicted. Despite the recommendations from the Congressional Budget Office, Amtrak did not cut its services back to the Northeast Corridor in 1982. The majority of Amtrak services was main-

282. Id. at 38.
283. Id. at 31: High labor costs are also often cited as a source of Amtrak’s relative cost disadvantage. Amtrak’s labor costs (corrected, for purposes of analysis, for traffic volumes and service levels) are significantly higher than those of bus or air. Amtrak’s labor costs, both per seat mile and per passenger mile, far outstrip those of the bus and airline industries. Labor costs per Amtrak seat mile are more than twice those of air and bus. On a passenger mile basis, Amtrak’s labor costs are more than twice those of air and more than triple those of bus. What drives Amtrak’s labor costs up are the labor intensity and restrictive work rules that have characterized rail passenger operations. By relying on 1980 data, the CBO Study does not take into account the effects of Amtrak’s new non-traditional labor contracts. See supra note 125.
284. CBO Study, supra note 203, at 33.
285. Id. at 39.
286. Id. at 39.
287. Id.
288. Id.
289. Id. at 63.
tained. Nevertheless, cost-control, productivity, and revenue enhancement measures in response to Congressional directives in the 1981 Act have allowed Amtrak to increase the portion of costs it recovers from the fare-box. From a revenue-to-cost ratio of .42 in 1981, Amtrak’s cost-recovery has improved to .62 in 1986. Thus, Amtrak now recovers 62 percent of its cost from revenues, and requires a federal subsidy for only 38 percent of its costs. Amtrak predicts further improvements in the future. Because Amtrak recovers more of its costs from its revenues, its operating deficit is reduced and the need for federal subsidies is correspondingly reduced. Amtrak’s federal subsidy has been reduced for nearly every year since 1981. Amtrak’s management claimed that its Fiscal Year 1986 request of $684 million is the lowest request since Fiscal Year 1977, and that in constant dollars, it was the lowest request since 1975.

The significance of these figures lies in the fact that the reduction of Amtrak’s subsidy has come without major reductions in Amtrak services. The 1982 Congressional Budget Office study concluded that only major service reductions could reduce Amtrak’s need for federal subsidies.

Yet without major service reductions, Amtrak’s subsidy in constant dollars of purchasing power has been reduced from $1.124 billion in 1981 to $602 million in 1987, while providing the same route system (24 thousand miles), a similar number of stations served (525 in 1981, 491 in 1986), and a comparable ridership (20.6 million in 1981, 20.3 million in 1986). The conclusion follows that Amtrak has satisfied congressional expectations as to economic efficiency. The favorable comments of many members of Congress verify the accuracy of this conclusion.

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290. Amtrak’s system route mileage has remained stable at 24,000 miles for each year since 1980, with a temporary reduction to 23,000 miles during 1982. Amtrak, Annual Report 1986 at 23.
292. For Amtrak’s summary of its federal subsidy requirements, see supra note 192.
293. Amtrak Response to OMB, supra note 177, at 1.
294. “Thus, as the Congress deliberates on a future budget for Amtrak, the only effective course toward substantially reducing the system’s current deficit and subsidy levels appears to be the termination of services on those routes that are the most unprofitable.” CBO Study, supra note 7, at 39.

As one who remains committed to limiting federal spending where possible, I am pleased that we have made significant strides towards controlling the federal investment in rail passenger service while at the same time meeting the nation’s transportation needs. . . . After much debate, Congress provided a level [of funding] necessary
IV. CONCLUSION

To conclude, it is necessary to address three questions. First, does Amtrak produce the benefits Congress intended? Second, how does the cost of producing these benefits compare with their value? And third, what would be the consequences if Congress assented to President Reagan's demand that Amtrak be eliminated?

A. WHAT BENEFITS DOES AMTRAK PRODUCE?

The history and language of Amtrak legislation make clear that in addition to transporting passengers, Congress expected Amtrak to provide the following public benefits:297 to maintain a balanced system of transportation in the United States; to connect urban areas and other parts of the country; to help end congestion on highways, in airways, and at airports; to provide freedom of choice to travelers; to transport passengers with a high degree of safety; to help conserve energy; and to provide an alternative system of transportation. Three studies (which were generally critical of Amtrak as a bad public investment) have provided the following information on Amtrak's delivery of these benefits.

1. AMTRAK'S ACKNOWLEDGED BENEFITS

A. SAFE TRANSPORTATION OF PASSENGERS

Professors Mulvey and Hilton each acknowledged that Amtrak transports passengers safely, especially when compared with the private automobile, which is the most commonly used mode of intercity transportation.298 Although both disputed that Amtrak is the most cost-effective way to achieve a high level of passenger safety, neither Mulvey nor Hilton described Amtrak as unsafe.299 The Congressional Budget Office made no findings on the question of passenger safety.

It is significant that two of Amtrak's critics acknowledged that Amtrak provides a benefit intended by Congress. Moreover, if Mulvey's analysis is correct, the benefit to society of reduced losses from accidents should

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298. MULVEY, supra note 7, at 60; HILTON, supra note 7 at 54.
299. MULVEY, supra note 7, at 60; HILTON, supra note 7 at 54.
increase if additional travelers choose Amtrak instead of their private automobiles. However, Mulvey’s estimate of the savings realized from prevented accidents may require revision to account for changing economic and social conditions.

B. ALLEVIATING HIGHWAY, AIRWAY, AND AIRPORT CONGESTION

Professor Mulvey acknowledged that within the Northeast Corridor, Amtrak makes a positive contribution to reducing congestion on highways, in airways, and at airports by diverting travelers from these overburdened modes. Neither Professor Hilton nor the Congressional Budget Office made any findings on this issue.

It should also be noted that as demographic and economic characteristics of urban areas changes, Amtrak service in other congested areas (e.g., Chicago or southern California) could become increasingly important in alleviating congestion problems outside the Northeast Corridor.

C. HISTORICAL AND RECREATIONAL VALUE

Although the Rail Passenger Service Act findings do not expressly recognize historical significance or recreational use as benefits to be obtained from Amtrak, these benefits may be inferred from congressional determination to maintain a national passenger railroad system.

The Congressional Budget Office raised the issue of historical and recreational value, and conceded that Amtrak service “certainly offers recreational benefits and stands as an historic link with the nation’s past.” Although such benefits are not readily measurable, the Congressional Budget Office concluded that the historical and recreational aspects of Amtrak are “of definite value to American life.”

2. DISPUTED BENEFIT: ENERGY CONSERVATION

Professor Mulvey, Professor Hilton, and the Congressional Budget Office each found that Amtrak made a minimal contribution to energy conservation. However, this conclusion should not go unchallenged. Im-

300. Mulvey states that diversion of travelers from less safe modes will result in a reduction in the annual toll of travel-related deaths and injuries. Id. at 60. It follows that if more passengers traveled by Amtrak instead of by automobile, there would be additional social savings due to reduced accidents.
301. Mulvey used the value of $300,000 per fatal accident. While this figure may have been useful in 1977, it should be adjusted to reflect current economic conditions. See MULVEY, supra note 7 at 60.
302. MULVEY, supra note 7, at 83, 92, 93.
303. CBO STUDY, supra note 7, at 22.
304. Id. at 22.
305. MULVEY, supra note 7, at 73; HILTON, supra note 7, at 52; CBO STUDY, supra note 7, at 15-17.
provements in rail equipment, the replacement of older equipment by
equipment of recent design, and changes in Amtrak operations since the
1970s may affect the conclusion that Amtrak saves only a small amount of
energy on the Northeast Corridor and none system-wide.

Data gathered in the early and middle 1970s would necessarily in-
clude data from older equipment received from the private railroads,
which is likely to have been poorly maintained and which is unlikely to
have been designed to achieve maximum energy efficiency. Amtrak did
not begin introducing new equipment until 1975.306 In addition, such data
may also include data from several poorly-performing long-haul trains
which Amtrak eliminated in 1979. Professor Mulvey's study was pub-
lished in 1977, and therefore, must have relied on data derived from older
equipment. The Congressional Budget Office study, although published
in 1982, relied on earlier studies published in 1979 and 1977.307 There-
fore, the data used in these studies may be biased, and therefore should
not be uncritically accepted as describing Amtrak's current ability to con-
tribute to energy conservation. Additional research should be conducted
to estimate Amtrak's energy conservation performance in the middle
1980s.

3. Benefits Which Were Not Studied

A. Amtrak's All-Weather Capability

In considering Amtrak's value as part of a balanced national trans-
portation system, the Congressional Budget Office concluded that Am-
trak's fleet was too small to be of significant value in national emergencies
or during transportation crises caused by strikes or energy shortages.308

However, another aspect of a balanced system of transportation
could be the ability to continue operating despite severe weather con-
ditions, such as winter blizzards. Amtrak has demonstrated that its trains
can continue to move passengers during blizzards after other modes of
transportation (airlines, buses, and automobiles) have been curtailed.309

307. CBO Study, supra note 7, at 14, footnote 3 referred the reader to 'CBO, 'The Current
and Future Savings of Energy Attributable to Amtrak' (May, 1979).'' That report quoted from
the following studies: Ram K. Mittal, 'Energy Intensivity of Intercity Passenger Rail', report submitted
to the U.S. Dep't of Transportation, December, 1977; Northeast Corridor Improvement Project,
'Final Programmatic Environmental Impact Statement,' vol. 1, June 1978 p. 3-106; and A. B.
Rose, 'Energy Intensity and Related Parameters of Selected Transportation Modes: Passenger
Movements', Oak Ridge National Laboratory, January 1979.''
308. CBO Study, supra note 203, at 18-19.
309. See, e.g., remarks of Sen. Malcolm Wallop: "For example, Amtrak is the only all-
weather mode of transportation to and from Southern Wyoming. During the 1982 Christmas
blizzard, Amtrak was the only means of travel across Wyoming's Southern tier. Sections of
Interstate 80 were closed periodically during that severe storm." 1983 Senate Transportation
This all-weather capability allows passengers to complete journeys which would have been interrupted if the passengers had chosen other modes.

It should be possible to estimate the value of this capability by techniques similar to Mulvey’s. The savings would consist of the value of the traveler’s time saved because the journey was completed, plus any savings realized from additional meals or overnight lodgings which the traveler was not obliged to purchase. Future research should attempt to estimate the savings which Amtrak produces in this manner.

B. Service to Small Communities

Another apparent benefit which has not been studied is the value of rail passenger service to small, isolated communities. There are numerous such communities in rural America which would not receive any public transportation service but for the fact that they are located on railroad lines. Amtrak claims that of the 510 station stops it served in 1984, 94 had no airline service, 52 had no bus service, and 25 had neither airline nor bus service.\(^{310}\)

The value of service to small communities may be great even though those communities have small populations and little economic strength. That the loss of service to small communities can be significant became apparent in 1983 when Amtrak re-routed its “California Zephyr” through Colorado, leaving the state of Wyoming without rail service for the first time in one hundred years.\(^{311}\) In some isolated areas, Amtrak package express service is used to carry human blood supplies and other perishable commodities.\(^{312}\) Although the Rail Passenger Service Act findings do not specifically mention service to small communities as an intended benefit, Congress did find that rail passenger service was necessary to connect urban areas with other parts of the country.\(^{313}\) Therefore, future

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310. See supra note 178. Recent service cutbacks by the bus industry may soon increase the number of communities deprived of public transportation. Horowitz, Greyhound To Shut 35 Terminals, Washington Post, Feb. 20, 1986, at E1, col. 3.

311. "Wyoming is a sparsely populated State with not quite a half million people living in 92,000 square miles, with varied geographic topography. Amtrak service connects 5 of the 10 largest cities straight across the southern tier of Wyoming that are not connected to one another by air service, and in some cases not even by bus service. These cities include Cheyenne, Laramie, Rawlins, Rock Springs, Green River and Evanston." Remarks of Sen. Malcolm Wallop, 1983 Senate Transportation Subcommittee Hearings, supra note 296, at 3; see also Schmidt, Hamlets in Southern Wyoming Fear Isolation After Amtrak Shifts a Route, N.Y. Times, Apr. 22, 1983, at A14, col. 2.


research should attempt to estimate the value of service to isolated communities.

Thus, despite David Stockman's assertion that Amtrak produces no significant public benefits, this review of the Rail Passenger Service Act and the results of three studies show that Amtrak produces the following public benefits:

a. acknowledged benefits
   1. safe transportation of passengers
   2. alleviation of highway, airway, and airport congestion
   3. historical and recreational value

b. disputed benefit
   1. energy conservation

c. benefits which have not been studied
   1. all-weather passenger transportation
   2. service to isolated communities

B. THE COST OF OBTAINING THE BENEFITS

Having seen that Amtrak produces a mixture of public benefits contemplated by Congress, the question follows: are these benefits outweighed by the cost of providing them? Professor Mulvey and the Congressional Budget Office, while willing to concede that Amtrak produced some public benefits, were quick to point out that the costs were disproportionate to the benefits realized, and that the investment of the same funds used for Amtrak in other programs could produce a greater return to the public.314

There is a conceptual difficulty with the analyses presented by Professor Mulvey and the Congressional Budget Office. Mulvey analyzed each of the purported benefits by deriving an economic value for each benefit and then comparing that value with the cost of providing the service (federal spending for a given year).315 The Congressional Budget Office followed a similar approach.316 The cost figures used were $741.2 million for 1976 and an estimate of $1.72 billion for 1990.317 Mulvey compared these figures with the value of each benefit realized (airport congestion reduced, accidents avoided, etc.). In each case, the benefit realized was far less than the cost of providing the service. The conclu-

314. MULVEY, supra note 198, at 143; CBO STUDY, supra note 203, at 22.
315. MULVEY, supra note 198, at 43.
316. CBO STUDY, supra note 203, at 9-23.
317. MULVEY, supra note 7, at 180, projects that the 1990 deficit for Amtrak operations will be $1,720.5 million dollars, which would have to be made up by federal subsidy. "The projected 1990 operating deficit is large. This deficit does not include the capital grants and guaranteed loans needed to develop the Amtrak system to meet the 1990 demand. The benefits, where they exist, do not begin to cover operating costs, much less contribute to the recovery of capital costs." Id.
sion followed: Amtrak is a poor public investment because the cost of providing the service exceeds the value of the benefits obtained.

This conclusion should not be accepted uncritically. By estimating the value of each benefit separately and comparing that to the entire cost of providing Amtrak service, these analyses overlooked the fact that the benefits are produced jointly and simultaneously. It would be more realistic to state that in each year of operation, Amtrak produces a mixture of public benefits. In addition to transporting passengers, Amtrak service produces some savings due to accidents avoided; some savings due to airport, airway, and highway congestion reduced; some value in the form of recreation; some benefit from serving small communities; and perhaps, some energy conservation as well.

Professor Mulvey’s study relied on the premise that each of these benefits could be measured and assigned an economic (dollar) value. He stopped short, however, of taking the total of the benefits and comparing this with the total of the costs. It is not clear why this could not be done, because the unit of analysis (dollars) is the same for both benefits and costs.

A future study could be constructed using the following reasoning: Amtrak produces a mixture of benefits each year; these benefits can be assigned dollar values through econometrics; the sum of the values can be compared with the cost of the program to determine whether the program is a good public investment.

If Mulvey’s estimates for 1976 were aggregated and compared with the costs, the following would be the results:

318. MULVEY, supra note 7 at 46:
Whenever possible, performance measures are expressed by a common numeraire—such as the present value, in dollars, of benefits and costs. Two major types of analysis are attempted: (1) the cost of achieving a given level of performance through the rail mode is contrasted with the benefits produced; and (2) the costs and benefits of rail passenger services are compared with costs of alternative measures to achieve the same level of benefits.

319. Id. at 93. One argument in rebuttal of this position is that it is improper to examine the benefits separately. The interrelationship, for example, between congestion and air pollution is such that the combined benefit may be greater than the sum of the individual benefits. . . . Analyzing the impacts separately has its drawbacks, but it avoids complications and incongruities that otherwise would render investigation hopeless.
Table #1. The 1976 Cost/Benefit Comparison\textsuperscript{320}

(millions of dollars)

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Cautious Estimate</th>
<th>Generous Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>highway congestion reduction</td>
<td>10.0</td>
<td>25.0</td>
</tr>
<tr>
<td>airport congestion reduction</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>accidents avoided</td>
<td>28.0</td>
<td>51.0</td>
</tr>
<tr>
<td>energy conservation</td>
<td>29.2</td>
<td>29.2</td>
</tr>
<tr>
<td>Aggregated benefits</td>
<td>68.7</td>
<td>106.7</td>
</tr>
</tbody>
</table>

If the federal government is thought to be purchasing these benefits by operating Amtrak, then it is proper to define as the federal "subsidy" only that portion of federal spending which is left after the benefits are deducted from total federal spending. Federal spending for 1976 was $741.2 million.\textsuperscript{321} Although the government spent $741.2 million to operate Amtrak, it received either $68.7 million or $106.7 million back in benefits, depending on which estimate is used. Using the cautious estimate, the federal subsidy would be $672.5 million, representing spending of $741.2 million less benefits received of $68.7 million. Using the generous estimate, the subsidy would be $634.5 million, representing spending of $741.2 million less benefits received of $106.7 million.

If Mulvey's 1990 estimates are considered, the following results are obtained:

Table #2. 1990 Cost/Benefit Comparison\textsuperscript{322}

(millions of dollars)

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Cautious Estimate</th>
<th>Generous Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>highway congestion reduction</td>
<td>100.0</td>
<td>200.0</td>
</tr>
<tr>
<td>airport congestion reduction</td>
<td>40.6</td>
<td>190.4</td>
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<tr>
<td>accidents avoided</td>
<td>88.5</td>
<td>188.2</td>
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<tr>
<td>energy conservation</td>
<td>244.0</td>
<td>244.0</td>
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<tr>
<td>Aggregated benefits</td>
<td>473.1</td>
<td>822.6</td>
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</table>

\textsuperscript{320} Benefits are taken from MULVEY, supra note 7 at the following locations: highway congestion reduction at 92; airport congestion reduction at 88; accidents avoided at 64; and energy conservation at 71.

\textsuperscript{321} The actual cost according to CBO was $651.2 million. CBO STUDY, supra note 7, at 26 (Table 2).

\textsuperscript{322} Benefits are taken from MULVEY, supra note 7 at the following locations: highway

Mulvey projected that in 1990, federal spending for Amtrak would be $1.72 billion dollars.\textsuperscript{323} Using the cautious estimate of benefits, the government would spend $1.72 billion dollars, and in exchange, receive benefits of $473 million, and pay a subsidy of $1.247 million. Using the generous estimate, the government would spend $1.72 billion dollars, and, in exchange, receive benefits worth $822.0 million, and pay a subsidy of $898.5 million.

It is clear that if Mulvey's figures are used, Amtrak would still have to be considered a heavily subsidized program in which costs far exceed benefits. However, it has been shown that several benefits (all-weather operating capability and service to small communities) were not considered, and estimates for other benefits (highway congestion reduction, airport and airway congestion reduction, safety, and energy conservation) may have been artificially low. If the revised estimates of these estimates were computed, then the benefit side of the ratio is likely to be greater, and the gap between costs and benefits would not be so great. A future study, taking into account the problems noted here, might produce a significantly different cost-benefit ratio, and a different judgement of whether Amtrak is a good public investment.

In addition to the fact that benefits may have been underestimated, it should be remembered that the cost to the federal government of providing Amtrak has been falling since 1981.\textsuperscript{324} None of the studies examined here considered the possibility that Amtrak could accept cuts in federal spending without drastically reducing service. However, that is exactly what happened; in 1987 federal spending for Amtrak was $602 million, down from $1.124 billion in 1981.\textsuperscript{325} Despite gradually falling federal expenditures, Amtrak has not drastically reduced its operations since 1981.\textsuperscript{326} If federal spending were to continue to decrease while benefits remained constant, then at some point, the cost-benefit ratio would turn positive. At that point, Amtrak would have to be considered a good public investment.

In weighing the costs and benefits of Amtrak, Congress should not rely mechanistically on the earlier studies which have purported to show that Amtrak was a bad public investment. Congress should instead take note of four observations:

congestion reduction at 176; airport congestion reduction at 174; accidents avoided at 158; and energy conservation at 164.

\textsuperscript{323} Id. at 180.

\textsuperscript{324} See supra note 192.

\textsuperscript{325} Id.

\textsuperscript{326} Amtrak's system-wide route mileage has remained stable at approximately 24,000 miles. See supra note 295.
1. the benefits of Amtrak should be considered in the aggregate when compared with the costs;
2. not all benefits may have been adequately estimated by prior studies;
3. empirical research is needed to provide accurate, up-to-date estimates of benefits; and
4. Amtrak’s federal spending requirements are falling without a major reduction in service.

C. THE CONSEQUENCES OF ELIMINATING AMTRAK

Faced with a serious federal budget deficit, Congress could yield to pressure from the Reagan Administration to terminate funding for Amtrak. Alternatively, the "Gramm-Rudman-Hollings Act" signed on December 12, 1985 could compel major reductions in Amtrak funding resulting in the elimination of Amtrak operations.

What would be the consequences to the American public? Amtrak contends that its share of the Fiscal Year 1986 budget was 7/100 of one percent. In return for this savings, what would the American public give up?

The apparent consequences fall into four categories:

1. the loss of rail passenger service to the traveling public and potential dislocations heavily-traveled areas;

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Following on the sale of Conrail, the administration proposes that the Federal Government get out of the passenger rail business by severing its financial ties to Amtrak. The budget proposes to terminate all Amtrak subsidies and dispose of some or all of Amtrak’s assets, the majority of which are in the Boston-to-Washington corridor, to one or more private sector companies, rail passenger organizations, or other entities. Such transactions will be designed to preserve viable intercity rail passenger services to the extent economically feasible. Despite providing the only intercity rail passenger service and a subsidy averaging $27 per passenger, Amtrak carried less than 0.5 percent of all intercity travel in 1985. The disposal of Amtrak’s assets will generate offsetting receipts estimated to be $1.0 billion in 1988, which will partially repay the more than $12 billion in Federal subsidy already paid to Amtrak.
See also: R. Pear, Reagan Budget Proposes Selling Part of Amtrak, N.Y. Times, Dec. 14, 1986, at A1, col. 1: It should be noted that the discussion of a private-sector buyer is purely hypothetical and speculative. The Reagan Administration’s belief that the sale of the Northeast Corridor assets would “generate offsetting receipts” clearly ignores the statutory duty for labor protection payments to laid-off employees in the event of service discontinuances. It should also be noted that the Administration’s statement that Amtrak carries less than 0.5 percent of intercity travelers ignores the fact that the share of any single carrier is tiny when compared with the entire market, and that Amtrak nevertheless carried more passengers in 1986 than Republic, Continental, or Trans-World Airlines (domestic operations). Finally, the Administration’s reference to a $27 per passenger subsidy figure implicitly acknowledges the progress made by Amtrak in reducing its subsidy requirements, because as recently as 1985, President Reagan quoted a $35 per passenger subsidy figure in his State of the Union Address. See supra note 1.


329. AMTRAK RESPONSE TO OMB, supra note 177, at 1.
2. the loss of the collateral public benefits contemplated by Congress in the Rail Passenger Service Act;
3. liability to Amtrak and potentially to the United States Government for labor protection payments; and
4. economic loss to the United States Government from scrapping Amtrak's assets.

1. The Loss of Rail Passenger Transportation

The elimination of Amtrak will have the obvious and immediate consequence of preventing the public from choosing rail passenger service as a form of transportation. In 1986, 20.3 million people used Amtrak to make their journeys. Particular groups (e.g., those who do not wish to fly, the elderly and handicapped, those who live in isolated communities not served by other carriers, and those who cannot afford automobiles) would be particularly affected.

The elimination of Amtrak would be felt most acutely in heavily-traveled areas of the country. Most frequently mentioned is the Northeast Corridor, but other transportation-intensive areas, such as Chicago and southern California would also feel the impact.

In the Northeast Corridor, Amtrak moves 17,500 people per day between Washington, New York City, and intermediate points. If Amtrak ceased to operate, these passengers would be obliged to find other means of transportation, with adverse consequences to the transportation systems of the region.

The elimination of Amtrak could also affect rail operations on the Northeast Corridor right-of-way. Amtrak owns, operates, and maintains the right-of-way from Boston to Washington. This right-of-way also serves the commuter rail systems operated by several states. Four freight railroads operate more than ninety through and local freight trains per day over the Northeast Corridor. Amtrak contends that if it stops operating, these other users would have to pay $217 million per year to receive the same service they now receive for $53 million. The result would be increased user charges for freight shipments on the Corridor and an increased burden on state-owned commuter railroads.

2. The Lost Objectives of the Rail Passenger Service Act

Congress recognized in the Rail Passenger Service Act that above and beyond the transportation of passengers, a national rail passenger

330. 1985 Senate Transportation Subcommittee Hearings, supra note 178, at 62 (remarks of W. Graham Claytor, Jr., President of Amtrak).
331. 1985 Senate Transportation Subcommittee Hearings, supra note 178, at 72.
332. Id. at 72.
333. Id.
system could provide additional benefits to society. The analytical section of this study concluded that Amtrak now makes a positive contribution in several of these areas. By eliminating Amtrak, the United States Government would be abandoning the public benefits of reduced highway, airway, and airport congestion; the savings realized from accidents avoided where automobile travelers chose Amtrak; energy conservation; an alternative form of transportation for use in severe weather or other emergencies; service to small and isolated communities, and Amtrak’s historical and recreational value. In particular, Amtrak contends that the elimination of rail passenger service on the Northeast Corridor would have a severe impact on highway and air transportation in that region, and would require the construction of additional highways and airports at great cost to the public.334

3. The Labor Protection Obligation

Amtrak has approximately 25,000 employees, including 4,200 employees of contracting railroads, who would lose their jobs if Amtrak ceased operations.335 The Rail Passenger Service Act provides that railroads (including Amtrak) must provide fair and equitable arrangements to protect employees affected by service discontinuances.336 This provision would require payments to idled workers in the event of service discontinuances.

Amtrak estimates that labor protection payments would be $2.1 billion over six years if the entire system were shut down.337 In the first year after termination, Amtrak estimates that its labor protection liability would be $645 million, approximately the same amount as Amtrak requested for its operating grant in Fiscal Year 1986.338 Amtrak also contends that the liquidation value of its plant and equipment would not begin to cover the labor protection liability, and that the United States Government (which created the labor protection obligation in the Rail Passenger Service Act) would ultimately be liable for these payments.339

334. Id. at 73.
335. Id. at 71.
337. The labor protection payments that Amtrak was required by statute to commit to pay to displaced employees will come to approximately $2.1 billion over a six year period. So in addition to $3 billion of investment [in assets] that gets scrapped, a new liability of $2.1 billion is assumed. In the first year, Amtrak’s liability would be about $645 million, which is actually more than our total grant for operations in 1985, and more than we are seeking for operations in FY 1986. In addition, the railroads over which we operate would be subject to an additional labor protection liability of about $200 million over a six-year period.
338. 1985 Senate Transportation Subcommittee Hearings, supra note 178, at 71.
339. David A. Stockman characterized the labor protection argument as “the most weak and
Thus, because the labor protection obligation is mandated by the Rail Passenger Service Act, and because the ultimate obligor for labor protection would be the United States Government, the elimination of Amtrak would not reduce federal spending or contribute to the reduction of the federal budget deficit.

4. **The Lost Value of Amtrak’s Assets**

Amtrak’s assets are currently worth approximately $3 billion. These assets include locomotives, rolling stock, rail equipment, the Northeast Corridor right-of-way, stations, and other fixed facilities. If Amtrak’s funding were terminated, then Amtrak would be forced into bankruptcy. Amtrak’s assets would be liquidated to meet its obligations, including the demands of creditors, labor protection, and the liquidation preference on the preferred stock held by the United States Government. However, there is a question of whether liquidation of Amtrak’s assets could cover the Corporation’s liabilities.

Amtrak contends that it is unlikely that there would be potential buyers for its assets, many of which are specifically designed for use in a national railroad passenger system. Without buyers, Amtrak’s $3 billion
lion in assets would have to be liquidated at approximately scrap value. Even assuming a return of 50 cents on the dollar, the loss to the United States Government and the American taxpayer would be about $1.5 billion. Congress must consider, therefore, whether the putative savings from eliminating Amtrak are justified in light of the likely losses.

D. AFTERWORD

When the consequences of eliminating Amtrak are considered, it becomes clear that Amtrak is more valuable to the American public as an operating railroad than as a bankrupt corporation seeking to peddle its assets. Because Amtrak is subject to the labor protection obligation, and because its share of the federal budget is miniscule, it is an illusion to believe that by terminating Amtrak funding, the United States would make a major step toward reducing the federal budget deficit. The elimination of Amtrak would render useless the considerable investment which the United States has made in building a national railroad passenger system since 1970. Moreover, such a policy assumes—falsely—that the other components of the transportation system (airlines, buses, and the private automobile) can expand indefinitely to serve the traveling public.

Since 1981, Amtrak has been transporting passengers at a gradually falling cost. This review of Amtrak's history and several studies critical of the system has shown that in addition to transporting passengers, Amtrak has been producing the public benefits contemplated by Congress in the Rail Passenger Service Act. Further research is needed to provide an accurate estimate of these public benefits. However, a future-oriented transportation policy should recognize that the problems of airport and airway congestion, highway congestion, energy conservation, and the safe transportation of passengers will continue to require rail passenger service in the future.

The American public's interests would be best served by a policy which seeks continuing improvements in service combined with cost reduction. The objective of such a policy should be that total benefits (fairly measured) equal, if not exceed, total costs. This would be a different standard than "profitability," but it is a standard which is more appropriate to Amtrak's history and mission. Such a policy would be faithful to Congress' original intentions when it enacted the Rail Passenger Service Act of 1970, and would lead to a stronger, more efficient, and more valuable national railroad passenger system.
Turbulence in the "Open Skies": The Deregulation of International Air Transport*

PAUL STEPHEN DEMPSEY**

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I. INTRODUCTION

United States foreign policy was characterized by consensus and cooperation on matters involving economic regulation during the first three decades following World War II. But such peaceful coexistence came to an abrupt end during the administration of Jimmy Carter, when confrontation was substituted for diplomacy as a catalyst for injecting free market economic theory into international aviation.

In the late 1970s, domestic airline deregulation had lowered fares for many consumers, and increased load factors and profits for carriers. To the Carter administration, what had been good for domestic markets was perceived as desirable for international markets as well. The policy of the U.S. government quickly became one of exporting deregulation.

That policy met fierce resistance abroad, for most governments emphasize the important role that their air carriers play in facilitating communications, trade, tourism, and national pride and prestige, as they "show the flag" around the world.1 As a consequence, most foreign airlines

1. Many factors have shaped the history of mankind. Among these factors have been transportation and communications—not causes, but certainly essential conditions of human progress.

The existence of facilities for human migrations has made possible the expansion of the more highly developed races, tribes and nationalities, and the submergence of the less advanced ones. . .

Improved means of world intercourse have also facilitated the dissemination and migration of cultural, as distinguished from biological forms. . .

Adequate means of communication and transportation are an essential condition of the progressive economic and political integration of mankind.

O. Lissitzyn, INTERNATIONAL AIR TRANSPORT AND NATIONAL POLICY 18-19 (1942 [hereinafter cited as O. Lissitzyn].

Rapid communications and transportation facilitate commercial intercourse between the various parts of a single nation and between nations. Hence, the possession of a
have long been viewed as "public utility" types of enterprises, with several obligations beyond those which would be provided in a "free" market. Hence, foreign air carriers have long been governmentally regulated, owned or subsidized.

Many U.S.-flag carriers also opposed their government's policy on grounds that, whatever the benefits of domestic deregulation, they were not likely to be realized in an environment in which government ownership and subsidization dominated the economic environment. Many criticized the Carter administration's "open skies" policy as naive, in giving foreign airlines access to interior U.S. cities in exchange for vague guarantees of pricing flexibility, free competition, and non-discrimination. And by the early 1980s, many were reeling from the economic turbulence created by the new regime.

And so began the most intensive international conflict in the history of aviation. Foreign governments objected both to ends and means. U.S. airlines objected on grounds that the Carter administration was giving away the store, in order to export an ideological belief in free market economics to an environment which was hardly "free".

The Reagan administration has since retreated somewhat from these ambitious beginnings. And paradoxically, resistance to market theory in some nations has since weakened. This article will trace the metamorphosis of economic regulation in international aviation from its origins to the contemporary environment.

II. GENESIS OF THE INTERNATIONAL AVIATION REGULATORY INFRASTRUCTURE

A. THE CONVENTION ON INTERNATIONAL CIVIL AVIATION OF 1944

From its inception, commercial air transport has relied on the support of national governments; in the years following World War I, only government subsidies and mail contracts sustained the economic viability of commercial aviation.\(^2\) In order to establish and define a basic legal

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\(^2\) Rapid means of communications such as air transport may prove an important competitive asset in international trade.

Id. at 38.

Transportation is the most important industry in the United States so far as employment, investment, and impact on other industries is concerned. It is the fundamental infrastructure which facilitates the free flow of commerce.

P. DEMPSEY & W. THOMS, LAW AND ECONOMIC REGULATION IN TRANSPORTATION IX (1986) [hereinafter cited as P. DEMPSEY & W. THOMS].

2. [T]he pilots and entrepreneurs soon discovered that they could not fly without their government's support, and that even within their own country they could not make their airline pay without subsidies or the air mail contracts which governments awarded. In every country the soaring ambitions of the aviators and their financiers came up against the controls and military designs of their governments. . . . [T]he European governments were determined from the beginning to harness aviation to their own needs, and
framework for international aviation, the Peace Conference of 1919 produced the Convention Relating to the Regulation of Aerial Navigation, more commonly known as the Paris Convention.3

The first article of the Paris Convention declared that each state enjoys "complete and exclusive sovereignty over the airspace above its territory."4 The homo sapien is a territorial beast, and this notion seemed to satisfy a powerful primordial imperative. In so proclaiming exclusivity of national territorial rights, the world community rejected the older concept of international maritime law which allowed "freedom of the seas", or unencumbered commercial use of the oceans during peacetime by vessels flying the flag of any nation and owned by citizens of any country.5

particularly to bind their colonies and overseas settlements more closely to the home country. The new "airlines" could not avoid being dependent on the governments which subsidized them, merged them or controlled their routes.

A. Sampson, Empires of the Sky: The Politics, Contests and Cartels of World Airlines 24 (1984) [hereinafter cited as A. Sampson]. International civil aviation enjoyed robust growth after the end of World War I. The cessation of hostilities provided the impetus for the development of aviation for transport purposes; large numbers of military aircraft and pilots were available for conversion to civilian use, governments and businesses realized the potential of aviation for expeditious transport and communications, and postwar conferences generated a need for official travel. B. Gidwitz, The Politics of International Air Transport 37 (1980) [hereinafter cited as B. Gidwitz]. See generally, P. Dempsey & W. Thoms, supra note 1, at 26-27.


[The Convention of Paris] repudiated the notion of freedom of the air and jealously guarded the new notion of air sovereignty, which limited planes more than ships; for nations were naturally far more worried by aircraft flying over their territory—whence they could spy, bomb, or secretly land—than by ships which under the law of the sea were allowed in theory to call at any port they wish.

A. Sampson, supra note 2, at 24. See id. at 91. "We were once told that the aeroplane had 'abolished frontiers,'" observed George Orwell in 1945. "Actually it is only since the aeroplane became a serious weapon that frontiers have become definitely impassable." Id. at 191. See id. at 62.

5. A. Lowenfeld, Aviation Law II-3 (1972) [hereinafter cited as A. Lowenfeld]. The notion that an ocean vessel may be owned by citizens other than those of the flag it flies has not been without controversy. See Dempsey & Helling, Oil Pollution by Ocean Vessels—An Environmental Tragedy: The Legal Regime of Flags of Convenience, Multilateral Conventions and Coastal States, 10 Den. J. Int'l L. & Pol'y 37, 50-65 (1980); Herman, Flags of Convenience—New Dimensions of an Old Problem, 24 McGill L.J. 1 (1978); McDougal, Burke & Vlassic, The Maintenance of Public Order at Sea and the Nationality of Ships, 54 Am. J. Int'l L. 25 (1960); P. Dempsey & W. Thoms, supra note 1, at 29-33; W. Wagner, supra note 3, at 1-8. Professor Lowenfeld predicted in 1975 that "Airlines would not be multilateral corporations . . . in terms of ownership and organization, but would be owned by the states or citizens of the state whose flag they flew." Lowenfeld, A New Take-Off for International Air Transport, 54 Foreign Aff. 36 (1975) [hereinafter cited as A New Takeoff]. Professor Bin Cheng has pointed out that the requirement of "substantial ownership or effective control" of an airline by nationals of the state whose flag it flies, widely incorporated into bilateral air transport agreements, has essentially
Henceforth, transit and landing rights for airlines would be largely defined by the explicit or tacit approval of the national governments in or above whose territory they would operate. This principle of air sovereignty insured that national governments would play a dominant role in the economic and political development of international civil aviation.

6. The legal and diplomatic framework within which international air transport has thus far developed is based upon three simple, yet fundamental principles: (1) Each state has sovereignty and jurisdiction over the air space directly above its territory (including territorial waters). (2) Each state has complete discretion as to the admission or non-admission of any aircraft to the air space under its sovereignty. (3) Air space over the high seas, and over other parts of the earth's surface not subject to any state's jurisdiction, is free to the aircraft of all states. Although of recent origin, these principles are now among the least disputed in international law.

7. Salacuse, The Little Prince and the Businessman: Conflicts and Tensions in Public International Law, 45 J. AIR L. & COM. 807, 814 (1980). Professor Lowenfeld points out that, unlike most other industries, "aviation directly engages the prestige, the fascination, and the national interest of almost all countries... [a]nd is a serious problem in international relations." A New Takeoff, supra note 5, at 36. Another commentator concurred: "We shall have a false idea of air transport history... if we think of it as purely a commercial enterprise, or neglect the extent to which political considerations have been controlling in shaping its course." O. Lissitzyn, supra note 1, at vi.

In the 1920s and early 1930s, the European governments realized the potential of international air transport in linking their overseas colonies to the home country. A number of colonial powers, including France, Great Britain, Germany, Belgium and the Netherlands, opted to concentrate their respective resources in the development of a single national carrier. These national carriers, owned and/or heavily subsidized by their respective governments, provided a sense of security in a rapidly changing international environment. See A. Sampson, supra note 2, at 23-39.

Across the Atlantic, a number of private airlines were prospering. Like their European counterparts, many were initially dependent upon government subsidies and mail contracts for their survival. The government of the United States, however, was not interested in the development of a single national carrier; by 1930, the "Big Four" private carriers—United Air Lines, Eastern Airlines, American Airlines, and Trans World Airlines—were firmly established as the dominant domestic airlines, all flying transcontinental routes. Another U.S. carrier, Pan American World Airways, had no domestic routes but had already developed a monopoly on rapidly expanding international routes.

By the mid-1930s, passenger traffic on the world's commercial airlines had grown substantially, replacing mail contracts as the primary source of carrier revenues. In Europe, however, the major civil aviation powers had repeatedly failed in their attempts to formulate a uniform aviation policy, which might have increased the efficiency of air travel on the continent. The emergence of the Nazis in Germany in 1933 sent shock waves through the civil aviation industries of Europe as governments once again began to give priority to the production of military aircraft.

In the United States, however, commercial carriers and manufacturers continued to prosper.
As World War II entered its final stages, several prominent members of the international community expressed concern over the postwar development of international civil aviation, realizing that this brave new world would require multilaterally negotiated solutions to a growing number of political, economic and technical problems. In response to these concerns, the United States agreed to sponsor an international conference in the hope that it would lay the foundation for the future growth of the industry.

Fifty-two nations attended the International Civil Aviation Conference in Chicago in November of 1944. Virtually all of the civil aviation powers of the prewar era were represented. Initial optimism for a comprehensive multilateral agreement soon faded, however, as economic and political rivalries emerged between a number of the Conference’s more prominent members, particularly the United States and Great Britain.

The Roosevelt Administration created a Civil Aeronautics Authority—later re-formed as the Civil Aeronautics Board (CAB)—to allocate and supervise air routes and rates. The American system continued to be one of “controlled competition,” in which the airlines, while remaining privately owned, were nonetheless dependent on the government for approval of existing and proposed routes. The Big Four domestic airlines were awarded certificates or “grandfather rights,” to the important and profitable domestic routes, while Pan American’s monopoly of international routes was allowed to continue for a time. In another important decision which would have far-reaching implications, American aircraft manufacturers were prohibited form owning or exercising control over any U.S. carriers.

The nightmare of World War II and the ensuing German occupation of most of Europe wreaked havoc upon the international civil aviation system. The German national carrier, Lufthansa, while denied most of its overseas routes, emerged as Europe’s dominant commercial carrier, taking over the fleets of several other prominent European carriers. Britain’s commercial carriers virtually ceased to exist, as its aviation industry was converted to the production of military aircraft, particularly fighter aircraft.

The outbreak of hostilities also had a profound effect on the American aviation industry, particularly after the entry of the United States into the war in 1941. The Big Four domestic carriers and Pan American were pressed into military service, some of the ferrying supplies to Allied forces in Europe and around the globe.

8. The Soviet Union was invited, but declined to attend, the Chicago Convention, presumably because the pro-fascist governments of Spain and Portugal were present. The Axis nations (i.e., Germany, Italy, and Japan) were not invited. See A. SAMPSON, supra note 2, at 65-66.


The second World War not only transformed the scope of the airlines but produced two contradictory political attitudes to the air. The horrors of air warfare, culminating in the atomic bomb on Hiroshima, generated a new insistence that both military and civil aircraft should be separated from national ambitions and put under international control. Yet every government was more convinced that it must protect and advance its own airlines, as the lifeline to its trade and security.

Id. at 57.

The system, whereby all over the world international air services are performed on the basis of bilateral air transport agreements is a result of the failure of the 1944 Chicago Conference and the subsequent failure of P.I.C.A.O. and I.C.A.O. to reach a Multilateral exchange of traffic rights for scheduled international air services. A multilateral agreement in the exchange of traffic rights was impossible in 1944 because of the widely divergent views of the two key aviation powers at the time, the U.S.A. and the
The United States entered the Chicago negotiations as the world's dominant aviation power, both in terms of aircraft production and technological expertise. It would emerge from the war with a tremendous fleet of long-range transport planes readily convertible to civilian use, as well as a massive industrial infrastructure which, when fully converted to civilian production, would be capable of producing large numbers of commercial aircraft. In addition to this obvious advantage in production capability, the American aircraft industry had achieved a number of important technological breakthroughs during the war years which would insure its supremacy for decades to come. Other nations represented at Chicago, particularly the United Kingdom, feared the prospect of unrestrained competition with the American civil aviation industry.\footnote{U.K., on the economics of international air transport. The U.K. was then champion of strict intergovernmental regulation of international air transport, whereas the U.S. advocated a system of free competition between international air carriers. McGill Center for Research of Air & Space Law, Legal, Economic and Socio-Political Implications of Canadian Air Transport 521-22 (1980) [citations omitted and emphasis in original] [hereinafter cited as McGill Study on Canadian Air Transport].}

Following World War II, the United States embarked on a crusade to encourage freer trade and economic cooperation between nations in the belief that the American people and, indeed, the Western World, would prosper only if obstacles to the free flow of commerce were eliminated. By eliminating tariff and nontariff barriers, it was believed that free trade would be encouraged, and the law of comparative advantage would dictate which nations were best suited for producing various commodities. Essentially, it was argued that each nation would produce the manufactured product, agricultural commodity, or raw material for which it was best suited (i.e., each would export that which it could produce most economically and most efficiently).\footnote{In the last stages of the war, U.S. carriers had captured almost 72% of world air commerce, compared to about 12% by British carriers. N. Taneja, U.S. International Aviation Policy (1980) [hereinafter cited as N. Taneja]. The European nations had devoted their full resources to the war effort; their civil aviation industries, either nonexistent or ill-equipped for the production of commercial aircraft, would require large expenditures of time and capital before they could realistically compete with their American counterparts. See generally, A. Sampson, supra note 2, at 64. W. Wagner, supra note 3, at 80-82. "Before the war, there were in the whole world 2,388 airplanes flying on regular air lines, 1,200 of which served on international routes; in 1944, the United States alone had 20,000 transport planes and five million skilled workmen in aeronautical industry." Id. at 81 [citations omitted]. "As no country in the whole world was able to compete, in the last period of the war, with American aeronautical equipment and personnel, it seemed certain that the proclamation of air freedom, parallel to the freedom of the high seas, would be advantageous to the interests of the United States." Id. at 81-82.}

In Chicago, the United States promoted a free-market philosophy in which airlines of all nations would have relatively unrestricted operating rights on international routes.\footnote{M. Willrich, Energy and World Politics 11-13 (1975).} In pursuit of this policy, American negotia-
tors called for a multilateral granting of all five freedoms and insisted that the determination of capacities, frequencies, and fares should be left to market forces rather than delegated to an international regulatory body. In the American view, reliance on commercial air carriers to provide the quantity and quality of transport services demanded by consumers was preferable to economic regulation by government fiat.

The British delegation in Chicago proposed that an international regulatory body be established to distribute international routes and determine capacities, frequencies and fares. Such a system, the British believed, would provide their aviation industry with a much-needed period of recovery, one which would allow it to survive direct competition with its American counterpart.

the limitation of carrier capacity. See Union, Report of the Chicago Convention on International Civil Aviation 31 (1944), the United States also called for the strict recognition of cabotage in international aviation, thereby restricting foreign access to domestic traffic. See id. at 1, 4. Hence, the U.S. negotiating posture at Chicago was not as laissez faire as some historians have suggested. But see A. Sampson, supra note 2, at 66-67.

13. The "five freedoms" are universally applicable working rules for bilateral air transportation relations. They are:

1) A civil aircraft has the right to fly over the territory of another country without landing, provided the overflown country is notified in advance and approval is given.

2) A civil aircraft of one country has the right to land in another country for technical reasons, such as refueling or maintenance, without offering any commercial service to or from that point.

3) An airline has the right to carry traffic from its country of registry to another country.

4) An airline has the right to carry traffic from another country to its own country of registry.

5) An airline has the right to carry traffic between two countries outside its own country of registry as long as the flight originates or terminates in its own country of registry.

B. Gidwitz, supra note 2, at 49-50; Azzie, Specific Problems Solved by the Negotiation of Bilateral Air Agreements, 13 McGill L.J. 303 (1967) [hereinafter cited as Azzie].

14. Capacity refers to the available number of commercial seats on a specific aircraft-type multiplied by the flight frequency of that aircraft-type during a specific time period (usually one week) over a specific route.

15. Frequency refers to the number of flights during a specific time period (usually one week) over a specific route.

16. See A. Lowenfeld, supra note 5, at II-5.

17. See generally, A. Sampson, supra note 2, at 63-67; N. Matte, supra note 3, at 128.

18. Britain urged establishment of an "International Air Authority" which would "(i) control routes and frequencies in accordance with agreed criteria designed to 'avoid wasteful competition on the one hand [but to] give ample facilities on the other'; (ii) allocate quotas to countries' carriers for services over the assigned routes; and (iii) set rates to 'avoid waste' and get rid of subsidies." A. Lowenfeld, supra note 5, at II-6 to II-7.

19. A. Sampson, supra note 2, at 67-68; N. Matte, supra note 3, at 129. Neither American nor British proposals gained significant support, however. Of the five proposed freedoms, only the first two "technical" freedoms were adopted by the majority of the nations attending the Chicago Conference. The United States, which viewed a multilateral granting of all five freedoms with no capacity of frequency restrictions as consistent with its stated goal of open competition in the marketplace, was once again opposed by the British and others who maintained that such a system would confer upon the United States a near-monopoly on a number of major international
The dominant civil aviation powers were unable to reach a meaningful compromise, and the attending nations were unwilling to surrender their sovereignty to an international regulatory body having the power to formulate and enforce a uniform aviation policy. Although the Chicago Conference failed in its attempt to formulate a comprehensive economic policy for international civil aviation or to effectuate an exchange of traffic rights, it laid the foundation for the postwar establishment of the International Civil Aviation Organization [ICAO].

Established in 1947, ICAO was given responsibility for regulating the many technical aspects of international civil aviation. The nations attending the Chicago Conference were in agreement as to the need for uniform technical standards; consequently, the jurisdiction of the ICAO was extended to such matters as aircraft licensing, airworthiness certification, registration of aircraft, international operating standards, and airways and communications controls. Today, ICAO is one of the largest and the most successful specialized agencies in the United Nations family, with 156 member nations.

A second institution which has played an important role in the post-World War II development of civil aviation is the International Air Transport

routes. The multilateral granting of fifth-freedom rights in itself was not totally unacceptable to the Europeans; early all nations at the Conference agreed that a certain amount of fifth-freedom traffic was essential to the profitability of many international air routes. Rather, the crucial disagreement concerned the degree to which capacity in relation to fifth-freedom rights should be regulated. Having little domestic traffic, the Europeans feared that a multilateral granting of fifth-freedom rights with no limitations on capacity would provide U.S. carriers with unlimited access to the European carriers' most valuable traffic. Thus, the nations represented at Chicago were unable to reach agreement on the economic structure of postwar civil aviation.

20. The participants in the Chicago Conference hoped to reach agreement with respect to both (a) safety, communications and technology, and (b) economic regulatory issues of entry, rates, frequency and capacity. The Convention created ICAO and gave it important responsibilities over the former questions, which it has performed quite well. But ICAO was given only limited general policy directions over the more controversial economic issues, and until relatively recently, the organization steered clear of them. See A. LOWENFELD, supra note 5, at II-5.

21. ICAO's Legal Director, Dr. Michael Milde, has pointed out that the Chicago Convention established ICAO as "an international organization with wide quasi-legislative and executive powers in the technical regulatory field and with only consultative and advisory functions in the economic sphere." Milde, The Chicago Convention—After Forty Years, 9 ANNALS OF AIR & SPACE L. 119, 112 (1984) [hereinafter cited as Milde]. See also, FitzGerald, ICAO Now and in the Coming Decades, in INTERNATIONAL AIR TRANSPORT: LAW ORGANIZATION AND POLICIES FOR THE FUTURE 47, 52 (N. Matte ed. 1976) [hereinafter cited as FitzGerald].

22. R. THORNTON, INTERNATIONAL AIRLINES AND POLITICS 32 (1970) [hereinafter cited as R. THORNTON]. In addition to the role it has played in regulating the technical aspects of international civil aviation, the ICAO has also succeeded in simplifying numerous economic aspects of the industry as well, such as customs procedures and visas. Id. at 34. The ICAO also assists the aviation industry by serving as a center for the collection and standardization of statistical data. Id.

Association [IATA]. IATA, whose membership consists of airlines companies certificated for scheduled operations by governments eligible to participate in ICAO, has had as its principal focus the setting of fares for international routes. IATA also addresses the financial, legal and technical aspects of international civil aviation.

B. BERMUDA I—THE MODEL FOR BILATERAL AIR TRANSPORT AGREEMENTS

With the failure of the nations attending the Chicago Conference to agree upon a comprehensive multilateral solution to the economic regulatory aspects of the international civil aviation industry, it became clear that bilateral negotiations between individual pairs of nations remained the only viable option for determining route assignments, frequencies, capacities, and fares. The Chicago Convention, the formal agreement executed at the conclusion of the Chicago Conference, reaffirmed the international legal principles embraced by the Paris Convention twenty-five years earlier, stating that “every state has complete and exclusive sovereignty over the airspace above its territory”, and therefore “[n]o scheduled international air service may be operated over or into the territory of a contracting State, except with the special permission or authorization of that State, and in accordance with the terms of such permission or authorization.” Accordingly, the United States entered into a series

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24. See generally Note, The Ins and Outs of IATA: Improving the Role of the United States in the Regulation of International Air Fares, 81 Yale L.J. 1102 (1972) [hereinafter cited as The Ins and Outs of IATA]. IATA was founded in Havana, Cuba, in 1945, as a successor to another IATA, the International Air Traffic Association, an international organization of airline companies which established many navigational and technical standards from its formation in 1919 until the outbreak of World War II. See generally, A. Sampson, supra note 2, at 38.

25. See A. Lowenfeld, supra note 5, at III-1 to III-30.

26. Id. at II-7 to II-8.


28. Chicago Convention, id. art. 1. B. Cheng, The Law of International Air Transport 3 (1962) [hereinafter cited as B. Cheng]. See A. Sampson, supra note 2, at 69-70. Dr. Michael Milde, Director of the Legal Bureau of the ICAO, summarized the principle of sovereignty as embraced by the Chicago Convention:

The Convention on International Civil Aviation—the cornerstone of legal regulation of international civil aviation for the past forty years—is based on the principle of complete exclusive sovereignty of States over their territory, except with special permission or authorization. Consequently, the granting of the economic rights to carry traffic remains a sovereign prerogative of each contracting State and is dealt with in bilateral agreements on air services which take into consideration mutual economic benefits of the States concerned and the proper balance of interest between such states.

Milde, supra note 21, at 121-22 (citation omitted).

of bilateral negotiations with a number of foreign governments with the objective of concluding air transport agreements which would secure important landing rights abroad for their international carriers.

American and British officials met in Bermuda in 1946 in an attempt to reconcile their respective aviation policies.\textsuperscript{30} The ensuing negotiations, while not the first of their kind in the postwar era, were nonetheless particularly significant in that they were the first between two nations each hoping to develop strong, long-haul trunk routes.\textsuperscript{31}

Both nations entered the talks with significant bargaining strengths. The principal British advantage was geographic in nature; by controlling numerous strategic landing and refueling locations around the globe, Britain, with its vast Empire upon which the Sun never set, could restrict American access to a number of important trunk routes. The primary U.S. advantage was its much-publicized domination in aircraft production and aviation technology.\textsuperscript{32}

Despite the difficulties encountered at Chicago, the two nations succeeded in reaching a compromise acceptable to both. With respect to fares, the United States retreated from its earlier opposition to any form of international control. It was agreed that IATA would bear primary responsibility for designating fares, subject to the approval of the governments affected by the IATA decision.\textsuperscript{33} If a government objected to an IATA-established fare, IATA would reconsider its decision until a solution acceptable to all parties was reached.\textsuperscript{34} It was also agreed that the designated carriers of each nation would be free to institute at their discretion capacity and designated fifty-freedom traffic arrangements, subject to the general principle that the primary objective of each nation's carriers should be the provision of capacity adequate to the traffic demands between the country of which such air carrier is a national and the country of ultimate destination of the traffic, and subject to ex post facto review of these carrier decisions by the involved governments.\textsuperscript{35}

\textsuperscript{30} The Bermuda Conference has since been described as "one of the most important events in international aviation history." Diamond, supra note 29, at 443. The agreement which it produced, Bermuda I, has been characterized as the "Magna Carta of international aviation." Comment, Bermuda II: The British Revolution of 1976, 44 J. AIR LAW & COM. 111, 112 (1978) [hereinafter referred to as British Revolution]. See A. SAMPSON, supra note 2, at 72.

\textsuperscript{31} R. THORNTON, supra note 22, at 35.

\textsuperscript{32} See Diamond, supra note 29, at 438-43; A. SAMPSON, supra note 2, at 72.

\textsuperscript{33} A. SAMPSON, supra note 2, at 73-5.

\textsuperscript{34} Prior to 1978, the United States routinely exempted the IATA ratemaking process from U.S. antitrust laws.

\textsuperscript{35} Jones, The Equation of Aviation Policy, 27 J. AIR L. & COM. 221, 231 (1960). Should one nation have reason to believe that a carrier of the other had instituted capacity or fifth-freedom arrangements in excess of the relevant traffic demands, it could request an ex post facto review by both governments of the carrier's actions. Id. See Diamond, supra note 29, at 444-47; and Azzie, supra note 13, at 205-06.
The Bermuda I agreement, as it came to be known, would become the prototype for bilateral air transport agreements throughout the world over the next thirty years.36 In addition to representing an essential compromise between the world's two leading civil aviation powers, Bermuda I reinforced the role of national governments in formulating international civil aviation policy.37

During the ensuing three decades, the United States entered into Bermuda I-type agreements with most of the 75 nations with which it had aviation relations.38 Most have been concluded as "executive agreements" rather than "treaties" submitted for the advice and consent of the U.S. Senate.39 A large number of third-party nations have also employed

The original Bermuda Agreement... left the determination of capacity and frequency of services in the first instance to the designated airlines, which were to act in accordance with predetermined guidelines. The guidelines obliged airlines to take into account each other's interests so as not to affect unduly each other's services; capacity was primarily to be related to traffic demand between the territories of the Contracting Parties and only secondarily to the requirements of fifth-freedom traffic (and traffic picked up or discharged at intermediate points). In the event of dissatisfaction with capacity and frequency of services, ex post facto review by governmental authorities might lead to negotiations or, eventually arbitration.

McGill Study on Canadian Air Transport, supra note 9, at 545 [citation omitted]; see id. at 522. One commentator has succinctly summarized the comprehensive results of the Bermuda negotiations:

The Bermuda principles were, in brief, the following: the routes to be operated between two countries and agreed in bilateral negotiations with individual government control over the designation of carriers to operate these routes; capacity and frequency levels (how big an aircraft is to operate a route and how frequently) are, in the first instance, to be left to the judgment of the operators themselves, subject to deliberately vague guidelines and ex post facto review if one party feels that its interests are being unduly affected; fares are negotiated by the airlines within the International Air Transport Association (IATA) framework.


Prior to 1946, the Chicago Conference had already drafted a Form of Standard Agreement, for provisional air routes. Most of the world's bilateral air transport agreements are not, however, patterned on this latter Form of Standard Agreement, however, but rather on the 1946 Bermuda Agreement.

McGill Study on Canadian Air Transport, supra note 9, at 522 [citation omitted and emphasis in original]. "The Anglo-American agreement at Bermuda became the prototype for all other countries over the next thirty years, and it was followed by a 'vast cobweb of bilateral international agreements'...." A. Sampson, supra note 2, at 72.

37. See generally, N. Matte, supra note 3, at 229-50. International civil aviation grew rapidly in the immediate postwar years as military aircraft and personnel were converted to civilian use. Rapid advances in technology made during the war years led to the development of commercial aircraft of increasing size and range.

38. Bermuda was entered into by the United States as an "executive agreement" rather than a "treaty" requiring the Constitutional advice and consent of the U.S. Senate, and became effective upon its signature on February 11, 1946. A. Lowenfeld, supra note 5 at Ill-11. However, it was subsequently submitted to the Senate, on June 11, 1946. Id. at Ill-17.

39. The term "executive agreement" has been defined as any agreement, other than a
Bermuda I as a model for their own bilateral air transport agreements.\textsuperscript{40} Under the U.S. standard from bilateral provisions, the United States was free to designate an unlimited number of gateway city pairs by virtue of language which read "from the United States..."\textsuperscript{41} The U.S. was also free to designate an unlimited number of carriers, by virtue of provisions which granted each nation the right to authorize service on each route by "an airline or airlines."\textsuperscript{42} Bermuda I-type agreements also gave carriers the right to determine capacity, although there were vague provisions requiring that: (a) air services should be closely related to traffic demand; (b) there should be a fair and equal opportunity for the air carriers of the two nations to operate over the designated routes; and (c) the "interest of the air carriers of the other government shall be taken into consideration so as not to affect unduly the services which the latter provides on all or part of the same route."\textsuperscript{43} Moreover, each nation enjoys treaty, which intends to bind the United States and any other government to any rights, privileges, and/or obligations. M. McDougal, Studies in World Public Order 424-26 (1960). A "treaty", on the other hand, is any agreement which, prior to Presidential ratification, receives the consent of two-thirds of the Senate. \textit{id.} at 425, 485, 503, 540, 561, 565. See L. Henkin, Foreign Affairs and the Constitution 176-84 (1972). See generally, W. Wagner, supra note 3, at 149; Wagner, The Colonial Airlines Case: Treaties and Executive Agreements Relating to Aviation, Wash. U.L.Q. 211 (1952); Wagner, Treaties and Executive Agreements: Historical Development and Constitutional Interpretation, 4 Cath. U.L. Rev. 3 (1954).

Federal Courts traditionally have not required that agreements of this nature be submitted to the Senate as treaties. Opposition to the characterization of such agreements as treaties rests partially on the argument that flexibility is an essential prerequisite to workable international agreements, for they must be regularly altered and amended subsequent to their implementation. Hence, if we are to retain this essential flexibility, perhaps only the fundamental provisions of the agreement should be submitted to the Senate for its advice and consent as a treaty (e.g., terms concerning capacity, rates, charter carriage, fifth freedom rights, and initially designated points), with subsequent modifications of less important issues to be concluded with an exchange of diplomatic notes.

\textsuperscript{40} See Comment, Bermuda 2: New Model for International Air Services Agreements, 9 L. & Pol'y Int'l Bus. 1259 (1979) [hereinafter cited as Bermuda 2 Model]. In fact, the student who authored the piece chose a particularly inappropriate title, inasmuch as Bermuda II has by no means become the new model for bilateral air transport agreements. See Lowenfeld, The Future Determines the Past: Bermuda I in the Light of Bermuda II, 3 Air L. 2 (1978) [hereinafter cited as Lowenfeld]. While a number of nations adopted the Bermuda bilateral as a model for their own air transport negotiations, many modified it to include pooling or more restrictive capacity clauses. See A. Lowenfeld, supra note 5, at II-11.

\textsuperscript{41} See Haanappel, supra note 36, at 252.

\textsuperscript{42} United States Standard Form of Bilateral Air Transport Agreement, Art. 3 (1953). See Haanappel, supra note 36, at 252.

\textsuperscript{43} United States Standard Form of Bilateral Air Transport Agreement Art. 8, 9, 10 (1953). See Haanappel, supra note 36, at 250. Similarly, section 6 of the Agreement insists that the provision of fifth freedom services shall not become the primary objective of capacity placed in the market. Indeed, it requires that capacity shall be related to (a) the traffic requirements between the countries of origin and destination, (b) the requirements of through airline operations, and (c) the traffic requirements of the area through which the airline passes after taking account
the right of *ex post facto* review of capacity.\textsuperscript{44} As to ratemaking, prior to 1960 most Bermuda I-type agreements contained an explicit endorsement of the IATA rate-making machinery, identifying procedures to be followed upon a failure of IATA to reach a consensus.\textsuperscript{45} In 1960, the United States revised its standard-rate article to eliminate specific endorsement of IATA. However, the Bermuda I-type bilateral agreements ordinarily allowed the aviation authorities of each nation to suspend filed tariffs prior to their effective date.\textsuperscript{46}

The airlines of pre-war Europe, most of them state-owned, and/or heavily subsidized, prospered during the post war years as routes rapidly expanded throughout the continent, as well as to the Americas, Africa and Asia. With the reemergence of European airlines in the late 1940s and early 1950s and the rapid growth in the number of bilateral transport agreements based on the Bermuda model, the strong dominance of U.S. carriers on international routes came to an end.

**C. THE U.S. CIVIL AERONAUTICS BOARD**

In the 1930's, the U.S. airline industry was in its infancy, subsidized and heavily dependent on Government funding. Payment for the carriage of mail was a primary source of income. In foreign nations, air transport was tied directly to government objectives as European colonial powers utilized the air industry to link empires. However, as the viability of private airlines increased, the demand for regulation of the industry also grew proportionally. While the perils of allowing the airline industry to operate in an unrestrained market were not as pressing in most of the world due to the fact that airlines were owned and controlled by national governments, in the United States, where private airline ownership was most prevalent, there existed a widespread national ambivalence towards competition\textsuperscript{47} in the aftermath of the Great Depression. As one commentator has remarked, "the nation was leery of relying on restrained competition to spur firms to satisfy the public's needs".\textsuperscript{48} Although the Post Office opposed regulation of the airlines on the grounds that it would reduce innovation and efficiency, Congress overwhelmingly passed the Civil Aviation Act in 1938.

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\textsuperscript{44} See generally Gertler, *Bermuda Air Transport Agreements: Non Bermuda Reflections*, 42 J. AIR L. & COM. 779, 803 (1976) [hereinafter cited as Gertler].

\textsuperscript{45} Bermuda 2 Model, supra note 40, at 1262.

\textsuperscript{46} Id. For a comprehensive discussion of the Bermuda I provisions, see Haanappel, supra note 36, at 248-50.

\textsuperscript{47} Behrman, *Civil Aeronautics Board*, in THE POLITICS OF REGULATION 75-120 (1990).

\textsuperscript{48} Id. at 81.
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The legislation established the Civil Aeronautics Board [CAB], to regulate the economic and commercial aspects of U.S. air transport. The legislative history of the Civil Aeronautics Act of 1938, the predecessor of the Federal Aviation Act of 1958, reveals that Congress recognized the air transport industry to be in its infancy\(^{49}\) and believed that the existing competitive environment could, in the absence of regulation, inhibit or impede its sound development.\(^{50}\) Congress sought to establish a regulatory structure similar to that which had been devised for other industries perceived to be “public utility” types of enterprises, in order to enhance their economic stability, avoid excessive competition, and thereby contribute to the sound economic growth and development of air transportation.\(^{51}\)

\(^{49}\) See Regulation of Interstate Transportation of Passengers, Mail and Property By Aircraft: Hearings on S.3187 by the Senate Comm. on Commerce, 73rd Cong., 2nd Sess. 1 (1934). Among the primary proponents of air transport regulation, and the author of the original bills, was Senator Patrick McCarran, who emphasized the significance of the pending legislation by stating that, “there was never anything before this country more vital from the standpoint of national development . . . than the legislation which is now pending before this subcommittee, because we are dealing with an infant industry, and we are dealing with it from the standpoint of what it can do for this country commercially, industrially, and as an arm of national defense. Civil Aviation and Air Transport: Hearings of S.3659 Before a Subcomm. of the Senate Comm. on Interstate Commerce, 75th Cong., 3rd Sess. 7 (1983) [hereinafter cited as Senate Hearings on S.3659].

\(^{50}\) Congress believed that air carriers were engaged in “intensive,” “extreme” and “destructive” competition both among themselves and with carriers of other modes of transportation, and that such an economic environment was having injurious effects upon the industry and its ability adequately to provide the service required to satisfy the needs of commerce, the public interest, and the national defense. By establishing a system for the orderly development of air transportation, it was believed that these deleterious consequences could be avoided. See Senate Comm. on Interstate Commerce, Air Transport Act, 1937, S. Rep. No. 686, 75th Cong., 1st Sess. [hereinafter cited as Senate Committee Report on ATA]. Virtually identical language was expressed in the subsequent Senate Report of Senate Comm. on Interstate Commerce, Air Safety Act, 1937, S. Rep. No. 687, 75th Cong., 1st Sess. 2 (1937) [hereinafter cited as Senate Committee Report on ASA].

One difficulty faced by air carriers prior to 1938 was an inability to attract sufficient investment capital. See Senate Subcomm. on Administrative Practice and Procedure of the Judiciary Commission, 94th Cong., 1st Sess. Civil Aeronautics Board Practices and Procedures, 207-08 (Comm. Print 1976) [hereinafter cited as KENNEDY REPORT]. It was argued that the order and stability insured by public regulation would create an economic environment in which this inability to attract capital would be diminished. See Senate Hearings on S. 3659, supra note 49, at 30-31; Civil Aeronautics Authority: Hearings on S. 3760 Before the Senate Commerce Comm., 75th Cong., 3rd Sess. 338-39 (1938) [hereinafter cited as Senate Hearings on S. 3760]; and House Comm. on Interstate and Foreign Commerce, Civil Aeronautics Bill, H.R. Doc. No. 2254, 75th Cong., 3rd Sess. 2 (1938) [hereinafter cited as HOUSE COMMITTEE REPORT ON CAB]. P. Dempsey & W. Thoms, supra note 1, at 26-29.

\(^{51}\) The underlying purposes of the Civil Aeronautics Act have been summarized as follows:

The leading argument for protective certification of air transportation services in 1938 was the assertion that uncontrolled entry would result in destructive competition, which, in turn, would prevent the attraction of adequate capital to the industry, as well as possibly threatening the maintenance of proper labor standards and adequate safety of operations. The attraction of adequate investment was also seen as an indirect
The CAB instituted broad policy changes in the post-war years.\textsuperscript{52} In the international sphere, the most important of these reflected a belief on the part of the U.S. government that regulated competition between privately owned U.S. carriers in both the domestic and international markets would insure reliable and affordable air transportation.\textsuperscript{53}

Prior to World War II and the establishment of the Civil Aeronautics Board, international air commerce of the United States was the almost exclusive domain of Pan American Airways and its affiliate Pan American-Grace Airways.\textsuperscript{54} Led by resourceful Juan Trippe, Pan American flew routes to the Caribbean, South America, across the Pacific to the Far East, and across the Atlantic to Europe. The authority under which Pan Am operated to those foreign destinations had been granted by private agreements between the airline and the governments of the foreign nations to which it flew. As the war wound down, the CAB announced that the negotiation of routes and other operating authority would henceforth be performed by the U.S. Department of State and the Board.\textsuperscript{55} The era of private arrangements between airlines and nations had ended with the dawn of an era of CAB regulation and international negotiation of air transportation agreements between governments.

In 1945, the CAB issued the \textit{North American Routes Case},\textsuperscript{56} which allocated transatlantic service to Europe among three U.S. carriers.\textsuperscript{57}

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\textit{REPORT OF THE CAB SPECIAL STAFF ON REGULATORY REFORM} 20 (1975).
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\textsuperscript{52} See Dempsey, \textit{The Rise and Fall of the Civil Aeronautics Board—Opening Wide the Floodgates of Entry}, 11 TRANSP. L.J. 91 (1979) [hereinafter cited as \textit{The Rise & Fall of the Civil Aeronautics Board}].

\textsuperscript{53} B. Gidwitz, \textit{supra} note 2, at 60.

\textsuperscript{54} U.S. flag carriers in the international market compete with a plethora of foreign-flag carriers enabled by government subsidy to maintain uneconomic operations immune from the rigors of the free market system. In the face of this competition, the CAB . . . regularly supported the concept of duplicative services by U.S.-flag carriers over a number of international routes negotiated under bilateral air transport agreements, rejecting the contention that the designation of a single U.S. flag entrant would foster that carrier’s capability to withstand foreign competition.

\textsuperscript{55} A. Sampson, \textit{supra} note 2, at 62. As Sampson pointed out: “[T]he C.A.B., under its new chairman Welch Pogue, had announced in October 1943 that the State Department and the CAB, not the airlines, would in future negotiate overseas air routes. ‘It rang up the curtain, as Pogue put it, for action between governments on the international state.’” \textit{id}.

\textsuperscript{56} 6 C.A.B. 319 (1945).

\textsuperscript{57} The three carriers were Pan American, TWA and American Export Airlines. The latter
Nevertheless, while continuing to encourage regulated competition among U.S. carriers, the Board existed to ameliorate the vicissitudes of the marketplace and the impact of excessive competition between carriers. For example, in the late 1960s, overly optimistic government and industry demand projections led the airline industry to invest in large numbers of the new generation wide-bodied aircraft. But passenger demand is always dampened when disposable income is squeezed by economic recession, as it was in the early 1970s. That, coupled with radically increased fuel costs after the Arab Oil embargo of 1973,\(^{58}\) caused airline profit margins to plummet into oceans of red ink.

Hence, the economic recession of the late 1960s, excessive investment in wide-body aircraft (induced by anticipation that the economic “boom” of the mid-1960s would continue into the 1970s), and enormous increases in the cost of aviation fuel (stimulated by the OPEC decision to

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was subsequently merged into American Airlines. 6 C.A.B. 371 (1945). However, except for service to London and Lisbon, the routes issued by the Board in 1945 were not duplicative. President Truman urged still greater competition between U.S.-flag international carriers: “My objective is to accomplish a route pattern in which our nation may have the benefit of competition to the principal traffic points in Europe, and to avoid a monopoly on the part of either of the United States carriers.” North Atlantic Route Transfer Case, 11 C.A.B. 676, 678-79 (1950). Beginning in 1950, both Pan Am and TWA served the four most important European gateways: London, Paris, Rome and Frankfurt. A. LOWNENFELD, supra note 5, at II-48. National Air Lines received authority to serve London in 1969. Miami-London Service Investigation, 51 C.A.B. 100 (1969).

It was recognized as early as 1935 by the Federal Aviation Commission that European nations were enthusiastically developing their commercial aviation capability in foreign markets for reasons of national pride and prestige. See Senate Comm. on Interstate Commerce, Federal Aviation Commission, S. Doc. No. 15, 74th Cong., 1st Sess. 82 (1935) [hereinafter cited as Report of the FAC]. However, Recommendation 25 of the FAC’s Report, which is part of the legislative history of the Civil Aeronautics Act of 1938, 52 Stat. 937 (1938)—the predecessor of the Federal Aviation Act of 1958—urged that “the status of American air transport in foreign fields competing with foreign-owned lines should in general not be one of competition between American lines, but of carefully-controlled regional monopoly.” Report of the FAC, supra at 88. The rationale for this position was essentially that “[i]f American air lines are to compete with lines under foreign direction it would be an obvious absurdity to divide the American strength by competition among a multiplicity of American flag enterprises.” Id. Consequently, this portion of the legislative history of the Civil Aeronautics Act of 1938 is inconsistent with the post World War II approach of the CAB and DOT in promoting U.S.-flag competition on international routes by awarding parallel grants of authority to more than one U.S.-flag carrier. Cf. Westwood & Bennett, A Footnote to the Legislative History of the Civil Aeronautics Act of 1938 and Afterward, 42 Notre Dame Law. 309, 314-19 (1967) (on the role of Federal Aviation Commission in the legislative process in this area); see generally H. Knowlton, Air Transportation in the United States 1-18 (1941); C. Puffer, Air Transportation 193-255 (1941). But see S. Richmond, Regulation and Competition in Air Transportation 152, 205 (1961) (on President Eisenhower’s policy in favor of competition between U.S.-flag carriers on interation routes). Dempsey, supra note 53, at 416-17.

escalate drastically the price of oil) placed the traditionally dominant U.S. carriers, Pan Am and TWA, in severe jeopardy. As a response to this crisis, in the early 1970s the carriers proposed, and the CAB authorized, two measures that departed from the established policy of fostering competition among U.S.-flag carriers in the international market.

The first consisted of capacity-reduction agreements among carriers. Submitted to the CAB by Pan Am, TWA, British Airways, and British Caledonian Airways, the agreements called for reduction in the number of flights between London and New York, Chicago, Boston, and Washington, D.C. The carriers contended that the flight reductions would enable them to decrease fuel consumption substantially and, consequently, to reduce expenditures and thereby ensure their continued economic viability. Given the peculiar competitive disadvantages of U.S.-flag carriers vis-a-vis subsidized foreign carriers, the Board approved the capacity-reduction agreements, although it had generally rejected such agreements in domestic markets, finding them adverse to the public interest.

59. Although Pan Am reduced its fuel consumption during 1974, its fuel costs for that year increased by $169,000,000. The operating losses sustained by Pan Am and TWA during the first five months of 1975 were partially attributable to the overwhelming increase in the price of oil. Pan American World Airways, Inc., CAB Order 75-9-11 (1975). See The Rise and Fall of the Civil Aeronautics Board, supra note 52, at 117.

60. Although the U.S. share of the U.S.-Europe passenger market fell to a record low of 38% in 1967, the reduction did not produce deleterious economic consequences for Pan Am and TWA, for the growth of transatlantic traffic had allowed them to enjoy increased revenues through the mid-1960's, despite their declining traffic shares. The relative position of U.S.-flag carriers in international markets dropped from a peak of 70% in 1951 to less than 50% in 1961. In the transatlantic market the U.S. share dropped to 37% against the eighteen foreign flat competitors in the market. See F. THAYER, AIR TRANSPORT POLICY AND NATIONAL SECURITY 273-74 (1965).

However, the last years of the decade saw both carriers suffer hemorrhaging. In 1969 Pan Am suffered an operating loss of $16,000,000. Transatlantic Route Proceeding, CAB Order 77-1-98, at app. II, 4-5 (1977). Subsequent to 1969 it enjoyed no net profits, and its net losses totaled $316,000,000 by the end of 1975. Pan AM-TWA Route Agreement, CAB Order 77-1-1, at 7 (1977). TWA's combined losses in its Atlantic and Pacific operations exceeded $54,000,000.

61. Approval was sought pursuant to 49 U.S.C. § 1382. It is well established that the federal government may approve agreements which, by their terms, violate the letter and spirit of the antitrust laws, provided that such agreements are required to satisfy a serious transportation need or to secure important public benefits. National Air Carrier Ass'n v. CAB, 442 F.2d 862 (D.C. Cir. 1971); National Air Carrier Ass'n v. CAB, 436 F.2d 185 (D.C. Cir. 1970); FMC v. Svenska Amerika Linien, 390 U.S. 283 (1968). Agreements otherwise violative of the antitrust laws might also be approved where the diminution in competition, when weighed against other public interest objectives, will assist in the effectuation of overall statutory policy. See Seaboard Air Line R.R. Co. v. United States, 382 U.S. 154 (1965); Minneapolis and St. Louis R.R. Co. v. United States, 361 U.S. 173 (1959); P. DEMPSEY & W. THOMS, supra note 1, at 241-245.


63. Capacity Reduction Agreements Case, CAB Order 75-7-98, at 15 (1975):

The views expressed by the Board . . . relating to domestic capacity agreements, cannot be applied to international capacity agreements without taking into account the
The second measure taken to forestall further worsening of the carriers’ economic condition involved a route-transfer agreement between Pan Am and TWA.64 “Although the realignment plan resulted in a significant reduction of direct competition between the two participating airlines,”65 the CAB authorized it for a limited time66 as a step “necessary
... to avoid a clear danger of a major cessation [of the carriers' international operations] with greater attendant public disruption." As a result of the route transfer, both carriers enjoyed increased load factors and enhanced profitability, but the U.S. share of transatlantic traffic suffered a sizeable reduction.

Although the United States sought to promote a certain degree of competition among its privately owned carriers, nearly all other major aviation powers promoted the growth and expansion of a single national carrier. As in the post-World War I era, these nations continued to view their carriers as instruments of national political and economic policy. As economic instruments, the national carriers took on even greater importance in the post-World War II era, relied upon by their governments to earn foreign exchange and promote tourism.


66. Approval pursuant to section 412 of the Federal Aviation Act was limited to a period of two years or 90 days after a final decision in the Transatlantic Route Proceeding, whichever transpired first. CAB Order 75-1-133 (1975). See also CAB Order 76-9-42 (1976); CAB Order 76-7-40 (1976); Pan Am-TWA Route Agreement, CAB Order 77-1-7 (1977). The agreement was subsequently extended for an additional two-year period by CAB Order 78-3-8 (1978). By the date of the extension (Mar. 1, 1978), the carriers had modified their original agreements so as to eliminate the more objectionable anticompetitive features. Id. at 4.


68. See CAB Order 77-1-98 (1977), for an objection to the concomitant balance of payments outflow. Dempsey, supra note 53, at 417-19.

69. The development of jet aircraft in the 1950s truly revolutionized the aviation industry, particularly at the international level. Aircraft manufacturers, especially those in the United States were soon mass-producing commercial airliners which made air travel safer, more efficient, and much faster. As aircraft increased in size and greater economies of scale were achieved, air travel became affordable to millions of consumers. A tremendous explosion in passenger traffic ensued, particularly on transatlantic routes, leading to rapid growth rates among international carriers.

These growth rates were not limited to American and European carriers. Throughout the post-war period, new airlines sprang up in Asia, Latin America and Africa, many owned and/or heavily subsidized by the governments of newly independent nations. Unlike U.S. carriers whose survival depended upon their ability to adjust to economic forces prevailing in the marketplace, the vast majority of these newly formed airlines were analogous to the European national carriers in that they were formed for reasons other than profitmaking, such as increasing tourism, earning foreign exchange, and enhancing international security and prestige. Supported financially by governments seeking access to prestigious markets, these new carriers increased competition in a number of key regions. In 1947, for example, TWA and Pan American carried more than 80% of all transatlantic passengers; fifteen years later, their share had fallen to just 32%,
III. THE ROUTE AND RATE REVOLUTION IN INTERNATIONAL AVIATION

A. THE ROUTE REVOLUTION: LIBERAL BILATERALS AND MULTIPLE PERMISSIVE ENTRY

The stability which had characterized the Bermuda-ICAO-IATA regime since World War II came to an abrupt end in the late 1970s. With the election of Jimmy Carter as President, the nation had a firm disciple of transportation deregulation in the White House.\textsuperscript{70} He appointed a Cornell University economics professor, Alfred E. Kahn, to serve as Chairman of the U.S. Civil Aeronautics Board.\textsuperscript{71} Kahn believed that the airline industry, both domestically and internationally, was fertile for unregulated com-

while 19 airlines were now providing service between the United States and Europe. A. SAMPSON, supra note 2, at 109-110.

The rapid technological advances of the 1950s and 1960s culminated in the development of wide-bodied or "jumbo" jets. The Lockheed L-1011, Boeing 747, and McDonnell Douglas DC-10, huge aircraft, capable of carrying several hundred passengers, were extremely expensive to purchase and maintain. Yet many international carriers viewed them as essential investments to insure their survival in an increasingly competitive marketplace.

While many international carriers grew at impressive rates during the 1950s, 1960s, and 1970s, the profits of individual carriers remained relatively low for several reasons. Intense competition on many routes undoubtedly contributed to the problem. The rapid technological advances of the post-war era have forced many carriers to raise or borrow billions of dollars to finance the purchase of new aircraft which, in turn, often became obsolete within a relatively short period of time.

By 1973, numerous international carriers had invested billions of dollars in entire fleets of wide-bodied aircraft. Unfortunately, their massive expenditures coincided with the Arab oil embargo of the same year. Cheap and abundant supplies of aviation fuel had made the tremendous expansion of the industry possible; the skyrocketing price of oil, coupled with one of the worst recessions of the twentieth century, brought many international and domestic carriers to the brink of financial collapse by the mid-1970s.

\textsuperscript{70} Although president Ford had begun the legislative call for deregulation, it was Jimmy Carter who became the 'ultimate deregulator.' A. SAMPSON, supra note 2, at 136.

\textsuperscript{71} Dempsey, Transportation Deregulation—On a Collision Course?, 13 TRANSP. L.J. 329 (1984) [hereinafter cited as Transportation Deregulation].

The high priest of deregulation was Alfred Kahn, a quick-firing Professor of Economics at Cornell University, who had regulated energy industries in New York State. Like Milton Friedman, he was both an economist and an evangelist: a witty talker with a long nose and a sharp chin, he popped up like an irreverent imp determined to unleash new forces; and he had no great respect for the giant airlines.

A. SAMPSON, supra note 2, at 135. Professor Lowenfeld put it this way:

President Carter—I suspect not fully aware of what he was doing—named Kahn Chairman of the Civil Aeronautics Board. . . . I am convinced that the arrival of Alfred Kahn in Washington—more than any given event—changed the environment for civil aviation in the United States, and (I venture to predict) in Europe as well. Kahn had not only immense energy and charm—a king of anti-pompousness (if there is such a word); he had complete confidence in this own analysis, he had little patience with precedents, less with lawyers, and still less with administrative procedures that to some appeared as due process of law but to him appeared as a major line of defense of the 'ins' against the 'outs'. A person with any other combination of qualities—even if on substance he agreed with Kahn—might have decided that his first priority was to persuade the Congress to move on the deregulation legislation which had been pending in Committee for over two years. Kahn, however, decided to do it the other way around: first
petition, because in theory: (1) demand is price-elastic (so that a moderate fare reduction will significantly fill unused capacity); (2) few economies of scale exist (so that costs are similar for fully loaded small or large aircraft); and (3) resources are mobile (so that aircraft can be shifted between markets as demand changes).\textsuperscript{72} The system of economic
demonstrate that deregulation can work, and then, if Congress had not done so in the mean time, it will fall into line eventually.

\textsection{2. A. Kahn, The Economics of Regulation} 209-20 (1970). Further, Kahn argued that governmental regulation had made carriers inefficient, while denying passengers the range of price and service options which flow from a competitive environment. \textit{See} Kahn, \textit{The Changing Environment of International Air Commerce}, 3 \textit{Air L.} 163 (1978) [hereinafter cited as Kahn].
Kahn believed that, “Wherever competition is feasible it is for all its imperfections, superior to regulation as a means of serving the public interest.” A. Sampson, supra note 2, at 133.
Before the Senate Judiciary Committee hearings chaired by Edward Kennedy, Kahn testified:
The objection [to regulation] is not necessarily that airlines have been forced by their competition to incur greater costs for denser schedules, more advertising, meals, and in-flight entertainment than they would if they were able to get together and restrict such expenditures. The objection is, rather, that those cost-inflating service improvements have not been subjected to the test of having to compete with lower-cost alternatives.
Professor Lowenfeld succinctly summarized the principal arguments against economic regulation in these terms:
\textit{[R]egulation or cartelization breeds inefficiency, shelters waste, and deprives the consumer of free choice. It isn’t, as we have seen in the American experience, that regulation or cartelization results in huge monopoly profits. . . . The point is only that when both price and market entry are controlled, whether by the CAB or under IATA plus national governments, costs go up, prices go up, and passengers pay for services they don’t want and can’t pay for services they do want.}
Lowenfeld, \textit{Deregulation—Is It Contagious?} in \textit{International Air Transport in the Eighties} 31 (H. Wassenbergh & H. Fenema ed. 1981). Conversely, other commentators have questioned the underlying premises of deregulation:
Another unchallenged assumption characterizing the thinking of the leaders of airline deregulation—mostly economists—was that regulation and efficiency were antithetical. Although regulation can work to promote inefficiency, the fault lies more within the purview of the agency and its management practices than within the principle of regulation itself. A glance at the highly regulated yet extremely efficient transportation systems of some Western European countries bears out this point.
Those who maintain their allegiance to deregulation argue that it is better for the industry and for the public in the long run; but no one seems to know how long that will be, and who else will suffer in the process. Deregulation proponents foresaw neither the extent of the upheaval in the airline industry, nor the inability of management to cope with sudden change. Deregulation was a high-risk venture, with the costs far higher than even its proponents predicted.
Airline deregulation was typical of the radical approach for getting government out of the marketplace. It is conceivable that it may eventually result in more efficient, less costly service, but that remains an open question. In the meantime, the landscape is still being littered with corporate wreckage, the result of uncertainty and the high risks of such radical surgery.
regulation which had been embraced by the Civil Aeronautics Board prior to Kahn was criticized as having "(a) caused air fares to be considerably higher than they otherwise would be; (b) resulted in a serious misallocation of resources; (c) encouraged carrier inefficiency; (d) denied consumers the range of price/service options they would prefer, and; (e) created a chronic tendency toward excess capacity in the industry." 73

73. Professor Alfred Kahn argued that because the airline industry is inherently competitive, the effort of the CAB in the four decades following its creation to restrain pricing competition led to "irrational service inflation." In Kahn's words, airlines had a tendency to compete not only "in adopting the most modern and attractive equipment and in the frequency with which they schedule flights, but also in providing comfort, attractive hostesses, in-flight entertainment, food and drink." A. KAHN, THE ECONOMICS OF REGULATION 212 (1966). By excessive scheduling and otherwise offering wastefully higher levels of service, marginal costs began to rise to the level of passenger fares. The upward pressure on costs squeezed profit margins and led to the industry to ask the CAB for a repeated series of additional fare increases, as ticket prices spiraled upward. While a high level of service might be desirable to some, Dr. Kahn would prefer the test of the competitive market place:

That test requires that customers be provided with a sufficient variety of price-quality combinations—consistent with efficient production—so that each can register a free and tolerably well-informed monetary appraisal of the quality differentials that are offered. . . . The reason why it is questionable that the service improvements produced by competition in the airline industry have been worth the cost is that the [CAB's] restrictions on price competition have denied consumers the alternative of less sumptuous service at prices reflecting its lower cost. They have therefore not had the opportunity to determine whether the better quality is in their collective judgment worth the higher cost of providing it. . . .

id. at 220. A subcommittee chaired by Senator Edward Kennedy (D-Mass.) agreed. It concluded that although the airline industry was potentially highly competitive, the CAB had restricted pricing competition and stifled new entry. Although consumer fares were high, airline profits were low, because excessive service competition exacerbated costs. It argued that with pricing and entry freedom, carriers could provide service with higher load factors at significantly reduced ticket prices. CIVIL AERONAUTICS BOARD PRACTICES AND PROCEEDURES, A REPORT OF THE SUBCOMMITTEE ON ADMINISTRATIVE PRACTICE AND PROCEDURE OF THE SENATE COMMITTEE ON THE JUDICIARY, 94th Cong., 1st Sess. (1975). See The Rise and Fall of the Civil Aeronautics Board, supra note 52, at 116-117. The competition unleashed by deregulation did lead to lower ticket prices for consumers and higher load factors in the late 1970s. See generally, E. BAILEY, D. GRAHAM & D. KAPLAN, Deregulating the Airlines: An Economic Analysis 55-56 (1983); S. Breyer & R. Steward, Administrative Law and Regulatory Policy 674-697 (1985); and S. Breyer, Regulation and Its Reform 197-221 (1982); Levine, Revisionism Revisited? Airline Deregulation and the Public Interest, 44 L. & CONTEMP. PROBS. 179 (1981); The Rise and Fall of the Civil Aeronautics Board, supra note 52, at 118. With the promulgation of the Airline Deregulation Act of 1978, Kahn was appointed Jimmy Carter's "Inflation Czar," and aviation novice Marvin Cohen, was elevated to fill the shoes of the CAB Chairmanship. As CAB Chairman Cohen himself said, "I came into this job from a law practice, where I didn't know much about aviation."


For a general criticism of the existing structure of air transport regulation, see Senate Subcomm. on Administrative Practice and Procedure of the Judiciary Comm., 94th Cong., 1st Sess., Civil Aeronautics Board Practices and Procedures (Comm. Print 1976); Report of the CAB Special Staff on Regulatory Reform (1975); Hearings on S.689 Before the Subcomm. on Aviation of Senate Commerce Comm., 94th Cong., 1st Sess. (1977) (testimony of Senator
As CAB Chairman, Kahn began to encourage pricing and service competition in domestic aviation, policies which were generally embraced by Congress in the Air Cargo Deregulation Act of 1977,74 and the Airline Deregulation Act of 1978.75 By lowering their rates, domestic airlines were able to tap the price elasticities of the market to encourage discretionary travelers to fill seats which might otherwise have flown empty. Consumers, who had been deprived of competitive fares under regulation, applauded the new regime.76 By 1978 the airlines industry, which

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was now able to fill unused capacity, enjoyed the largest profits in the history of domestic aviation. 77

These initial successes with domestic airline deregulation led the Carter Administration to begin to export its policies into international markets. In the years preceding the Carter Administration, only two major U.S.-flag carriers served the major routes in the U.S.-Asia market (i.e., Pan American and Northwest Orient), the U.S.-Latin America market (i.e., Pan American and Braniff), and the U.S.-Europe market (i.e., Pan American and TWA). 78 Bermuda I and its progeny had not specifically limited the number of carriers which could be designated to serve the routes specified in their annexes. 79 However, prior administrations has been reluctant to certificate a significantly larger number of U.S.-flag vis-à-vis

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77. The Rise & Fall of the Civil Aeronautics Board, supra note 52, at 119. Several industry analysts pointed out the catalytic impact these profits had upon the U.S. government’s decision to export deregulation:

It is probable that this short spurt of strong growth, in this very cyclical industry, contributed to the fervor of the Carter Administration deregulators. The CAB and other U.S. air transport policymakers have typically exhibited short memories, and have acted to expand competition during (or just after) the intermittent periods of industry growth and prosperity.

M. BRENNER, supra note 71, at 108, n.80.

78. Prior to 1969, only two U.S.-flag carriers (i.e., Pan Am and TWA) were designated to serve the North Atlantic. That year, a third carrier, National Air Lines, was authorized to provide service between Miami, its domestic hub, and London. Miami-London Service Investigation, 51 C.A.B. 100 (1969). Dempsey, supra note 53, at 415-34. National Air Lines was acquired by Pan Am in the late 1970s. See Note, The Airline Merger Cases: CAB Application of Clayton & 7 After Deregulation, 12 TRANSPL. L.J. 139, 149-53 (1981).

Before the beginning of World War II, Pan Am had enjoyed the exclusive opportunity to serve as the United States “chosen instrument” in most international markets. See A. SAMPSON, supra note 2, at 62, 77-83. That privilege began to be diluted after the end of the war:

In 1946 Braniff, Chicago and Southern, Western, Eastern, National, Colonial and American Airlines all obtained rights to fly to various parts of Central America, the Caribbean islands and South America. United Airlines was granted a route extension from San Francisco to Hawaii. Northwest Airlines began its services through Alaska to the Far East. And, finally, Transcontinental and Western Air (later Trans-World Airlines), which had already received authority to fly across the Atlantic in 1945, was granted Pacific routes as well in 1946 and thus became America’s second worldwide airline.


79. CAB Chairman Marvin Cohen described the Carter Administration’s approach on this issue as follows:

In terms of multiple designations under the Bermuda I standard form, we have multiple designation. The agreement says airline or airlines, with an “s”. When we negotiate, recently in the past 3 or 4 years, we have been negotiating for more market flexibility.

The right of multiple designation was already there in the agreement. Some countries have not been very happy with it and have limited it somewhat or tried to and we have fought down the line. . . .

House Hearings on International Aviation, supra note 73, at 760.
foreign-flag carriers in any particular market, thereby retaining a rough parity, or a general quid-pro-quo balance.\textsuperscript{80} But beginning in the late 1970s, the CAB began to designate a large number of new U.S.-flag entrants to provide service between several interior U.S. points and London—markets which had therefore lain dormant under Bermuda I.\textsuperscript{81} In the Transatlantic Route Proceeding, several additional U.S.-flag carriers were authorized to compete in the transatlantic market, including Delta Air Lines (Atlanta-London), Braniff Air Lines (Dallas/Ft. Worth-London), and Northwest Airlines (to serve points in Scotland, Denmark, Norway, Sweden and Iceland), while the operating rights of Pan Am, TWA and National in this market were expanded.\textsuperscript{82} The U.S. Civil Aeronautics Board took other actions which offended the British government, including its refusal to approve capacity limitation agreements proposed by the United Kingdom in 1976 as an attempt to "shore up" the deteriorating shares of its airlines in the U.S.-U.K. market.\textsuperscript{83}

\textsuperscript{80} Although the typical bilateral air transport agreement, patterned after the Bermuda I model, Air Services Agreement, United States-United Kingdom, February 11, 1946, 60 Stat. 1499, T.I.A.S. No. 1507, permits designation of "an air carrier or carriers" by each signatory state, \textit{id.} art. 2(1), governments have remained conservative in their construction of the rights and obligations arising thereunder. For the three decades following World War II, most nations of the world, including the United States, implicitly construed such agreements as limiting the number of domestic carriers that could properly be designated on international routes. Hence, each nation typically selected only one of its domestic carriers to compete over these routes, except in certain more heavily traveled markets (e.g., New York-London). Yet, notwithstanding thirty years of international practice, the liberal language of the Bermuda I type agreements may be interpreted as not explicitly limiting the numbers of carriers which might be designated on international routes.

\textsuperscript{81} Dempsey, \textit{supra} note 53, at 415-34.

\textsuperscript{82} \textit{id.} at 419-23. Five new U.S.-flag carriers were certificated between 1978 and 1980 in the transatlantic market: Air Florida, Braniff, Delta, Northwest, and Western. \textit{House Hearings on International Aviation, supra} note 73, at 973.

\textsuperscript{83} \textit{See Comment, Aviation Law—Air Services Agreement Between the United States and the United Kingdom, 8 GA. J. INT'L & COMP. L. 211 (1978); British Revolution, supra note 30, at 114.}

The thrust of the British complaint was that Bermuda I resulted in an imbalance of benefits in favor of the United States and that competition under Bermuda I had allowed U.S. carriers to seize too large a share of the market. U.S. carriers accounted for 58 percent of the total airline traffic between the United States and Britain, compared to Britain's share of 38 percent, the remaining 4 percent went to other carriers. Moreover, British carriers were flying the Atlantic at only 30 to 62 percent of capacity, whereas U.S. flights were generally operating at 48 to 62 percent of capacity. By British accounts, this resulted in combined U.S. airline revenues of $512.8 million, as compared with British airline revenues of $227.5 million.\textit{Bermuda 2 Model, supra} note 40, at 1263 (citations omitted). The British were also concerned about U.S. carrier profits on fifth-freedom routes between London and Continental European points. \textit{id.} at 1263-64. Other grievances included "the manner in which the CAB exercised authority over rates and, although never made explicit, probably a high degree of irritation at U.S. public resistance to the proposed institution of supersonic Concorde service." M. BRENNER, \textit{supra} note 75, at 13.
Dissatisfaction with these efforts led the British government to renounce *Bermuda I* in 1976, which under the terms of the bilateral began a one-year countdown to termination. Vigorous negotiations between the two governments resulted in the signing of a new bilateral air transport agreement, *Bermuda II*, shortly prior to the expiration of its predecessor.\(^84\) In many ways, the new agreement was considerably more restrictive than *Bermuda I*, *inter alia*, limiting the number of carriers which may be designated to serve specific routes, imposing capacity controls, and curtailing U.S. carriers' fifth-freedom rights.\(^85\)

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The negotiations were extremely difficult, particularly for the U.S. negotiating team, whose task was made more difficult by a change in Administrations (Ford to Carter) midway in the 12-month negotiating period. The British held firm to their basic position and it was not until the very last minute that a new, and more restrictive, agreement was reached. Among other things, it limited the number of permissible scheduled carriers, enabled greater government control over capacity, and significantly reduced U.S. carrier "Fifth Freedom" traffic rights.

M. BRENNER, supra note 75, at 13.

85. Sion, *Multilateral Air Transport Agreements: The Possibility of a Regional Agreement Among North Atlantic States*, 22 VA. J. INT'L L. 155, 162-64 (1981) [hereinafter cited as Sion]; Schaffer & Lachter, *Developments in United States International Air Transportation Policy*, 12 LAWYER OF THE AMERICAS 585, 586-87 (1980) [hereinafter cited as Schaffer & Lachter]. Under *Bermuda I*, both Pan Am and TWA had been authorized to serve the markets between London on the one hand, and Boston, New York and San Francisco, on the other. *Bermuda II* permitted dual U.S.-flag designations at only two points (New York and Los Angeles were ultimately selected by the CAB). The single designation points authorized under *Bermuda I* to enjoy nonstop service to London were Atlanta, Cleveland, Dallas/ Ft. Worth, Denver, Houston, Kansas City, Minneapolis/St. Paul, New Orleans, Pittsburgh, St. Louis, and Tampa. *Bermuda II* reduced the number of new points for which U.S.-flag carriers could be authorized to two in 1978 (Atlanta and Dallas/Ft. Worth) and two in 1980 (Houston and a "wild card" city, to be subsequently named). *Bermuda II* also diminished the fifth-freedom opportunities of U.S.-flag carriers. They lost the right to carry local traffic on flights beyond London and Prestwick/Glasgow and Austria and Belgium (in 1980), and the Netherlands, Norway and Sweden (in 1982). Although *Bermuda I* placed no capacity or frequency restrictions on carriers other than *ex post facto* governmental review, *Bermuda II* allows the two governments to challenge carrier schedules prior to their implementation. Dempsey, supra note 53, at 436-38.

One commentator noted that *Bermuda II* "was a very restrictive undertaking between the United States and the United Kingdom, because it restricted capacity, eliminated fifth freedom beyond [rights], recognized restrictive charter roles, and . . . provided greater benefits to the United Kingdom than to the United States." *House Hearings on International Aviation*, supra note 73, at 508 (testimony of Edward V. Driscoll). One of the principal benefits to U.S. carriers arising from the new agreement is the opportunity to engage in unlimited blind-sector operations beyond London to points in Europe. This essentially allows U.S. carriers to carry passengers originating in the United States to their continental European destinations via London. *See British Revolution*, supra note 30, at 117. *See generally, Haanappel, Bermuda 2: A First Impression, 2 ANNALS OF AIR & SPACE L. 139 (1977).* Another major transatlantic revolution was born in 1977 when Britain's Freddie Laker was given operating authority to inaugurate low-fare "Skytrain" service between London and New York. Schaffer & Lachter, supra at 591. "Perhaps the most extraordinary contemporary development in scheduled transatlantic air transportation has been the inauguration of Skytrain by Laker Airways Limited [Laker] in the fall of 1977." Dempsey,
However, *Bermuda II* was not to become the new model for U.S. bilateral air transport agreements that *Bermuda I* had been for more than three decades. *Bermuda II* was described by Senate Commerce Committee Chairman Howard Cannon (D-Nev.) as "the greatest step backward in forty years of attempting to bring market-oriented competition to international aviation." In the Summer of 1978, President Carter issued a Statement of International Air Transport Policy which established the objectives of multiple-carrier entry in international markets and increased pricing competition. Alfred Kahn described the

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68. *Statement Concerning United States Policy on the Conduct of International Air Transport Negotiations*, 14 *WEEKLY COMP. OF PRES. DOC.* 1462 (Aug. 28, 1978). In negotiating new aviationbilaterals, the U.S. objectives were henceforth to be:

1. Creation of new and greater opportunities for innovation and competitive pricing that will encourage and permit the use of new price and service options to meet the needs of different travelers and shippers.

2. Liberalization of charter rules and elimination of restrictions on charter operations.

3. Expansion of scheduled service through elimination of restrictions on capacity, frequency, and route and operating rights.

4. Elimination of discrimination and unfair competitive practices faced by U.S. airlines in international transportation.

5. Flexibility to designate multiple U.S. airlines in international air markets.

6. Encouragement of maximum traveler and shipper access to international markets by authorizing more cities for nonstop or direct service, and by improving the integration of domestic and international airline services.

7. Flexibility to permit the development and facilitation of competitive air cargo services.

Id. CAB Chairman Alfred Kahn stated the U.S. negotiation objectives somewhat differently:

1. Eliminate anticompetitive restrictions on charters and supplemental carriers;

2. Expand opportunities for new low-fare scheduled service;

3. Obtain maximum access to markets by expansion of the number of nonstop U.S. gateways;

4. Secure an adequate number of multiple-carrier designations;

5. Avoid restrictions on capacity and frequency; and

6. Acquire maximum flexibility for U.S.-flag carriers to operate to intermediate and beyond points.


In the Ford Administration, U.S. international aviation policy was guided by the following six objectives:

1. Promotion of an international economic environment and aviation structure that would be conducive to competition among carriers;

2. Reliance on market forces to the greatest extent possible, realizing that the views of other nations may differ from our own policies;
negotiating strategy of the Carter Administration in these terms:

We had something to offer foreign governments willing to expose their carriers to free competition—additional access to the rich American market. And we offered to do so, if in turn they would admit competing American carriers into their cities, accept our increasingly liberal charter rules, renounce limitations on the number of permissible flights, and accept limitations on their unrestricted right to disallow competitive fares.99

In the three decades following World War II, the United States had pursued a bilateral negotiating policy which emphasized an equitable exchange of economic benefits (i.e., a trading of operating rights having approximately equal market value).90 There had been occasions, particularly in the period 1955-1957, where it was alleged that the United States had "given away" valuable route opportunities to Germany and the Netherlands for policy and political considerations unrelated to international aviation.91 But these gifts pale in insignificance when compared with the indiscriminate generosity of the Carter administration.

Under Carter, the traditional U.S. negotiating objective of obtaining an equality of operating opportunity for the carriers of both nations and a fair exchange of traffic rights was abandoned, in favor of a strategy aimed at enhancing consumer benefits. In essence, this was something of a deja vu of the approach the United States had advocated decades earlier at Chicago. Initial successes with the exportation of the pro-competitive policies were achieved in the transatlantic market, "where there was already so much competition in fares and service that a number of European governments believed their airlines would gain more from increased

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90. See Lissitzyn, Bilateral Agreements on Air Transport, 30 J. AIR L. & COM. 248 (1964). "The conclusion of the agreement with Germany coincided with a visit of Chancellor Adenauer to Washington, lending strength to the suspicion that high policy considerations contributed to the decision to grant to the German airline what appeared to be rather liberal treatment with respect to the route exchange." Id. "The Netherlands had little to offer as a quid pro quo in the way of air transport privileges, but good relations with a NATO ally seemed to be at stake." Id.
access to the U.S. market than they would lose from a little more competition."\footnote{92}

The major Benelux nations (i.e., Belgium and the Netherlands) were the first to embrace the pro-competitive approach by entering into liberal bilateral air transport agreements which surrendered restrictions on numbers of carriers, capacity and rates in exchange for access to lucrative interior U.S. markets.\footnote{93} By expeditiously authorizing multiple U.S.-flag entrants, the Board hoped to put pressure on other European governments in close geographic proximity to jump aboard the competition bandwagon so as to avoid the loss of tourists and business travelers to Brussels and Amsterdam.\footnote{94} Liberal bilateral air transport agreements were concluded during 1978 between the United States and the Netherlands,\footnote{95} Belgium,\footnote{96} and Israel.\footnote{97} IATA Director General Knut Ham-

\footnote{92. M. Brenner, supra note 75, at 106. The U.S.-Europe market had already been extremely competitive for many years, while historically there had been only three U.S. scheduled passenger airlines (principally Pan American and TWA), there were large numbers of charter airlines (both U.S. and foreign) competing for shares of the U.S.-Europe market, as well as many foreign scheduled airlines. Every major Western European country had its "flag" carrier (with the three Scandinavian countries forming the SAS consortium) and several Eastern European airlines flew to the United States as well. Non-European airlines also flew the North Atlantic to the United States via Europe from India, Pakistan, Iran and Israel. While most of the European airlines theoretically served only their homelands, in practice many of them used their home port as funnels and transfer points to serve all of Europe, the Middle East, and Africa. Carriers such as Air France, British Airways, KLM, Lufthansa, Sabena and Swissair, in particular, provided extensive geographic competition. In addition, the transatlantic services were subject to severe price competition from the charter airlines. By 1977 more than 25 percent of all U.S.-Europe passengers flew on charter flights including those operated by scheduled airlines. Id. at 105. By 1978, the North Atlantic was already the most highly competitive international aviation market with 34 U.S. and foreign-flag carriers performing scheduled service over some of the most heavily traveled international routes on the planet. CAB Order 78-9-38, at 3 (1978).}

\footnote{93. CAB Order 78-9-2 (1978), at 6.}

\footnote{94. "Because of the proximity of Brussels and Amsterdam to the other major gateways on the continent, these new services may encourage them to consider allowing equivalent attractive service to their major airports in order to avoid losses of traffic." Id. at 7. CAB Chairman Marvin Cohen subsequently noted the success of this approach: The bleed-off of traffic from Scandinavia, Germany, and France to Belgium and Holland was a catalyst to the Germans to enter a more liberal agreement and forced France and the Scandinavians to introduce and accept low-fare offerings. In addition, the British desire for low-fare service by Laker led to acceptance of a de facto open-pricing regime. }

\footnote{95. Protocol Amending the Air Transport Agreement of 1957, as amended, Mar. 31, 1978, United States-Netherlands, T.I.A.S. No. 1507.}


marskjold predicted that "1978 will no doubt go down in history as the year of the most intensive regulatory changes since the time of the Chicago Convention." 98 But there was a significant difference: Chicago had been a multilateral consensual resolution of conflicting national political and economic interests; the Carter Administration’s approach was one of unilateral insistence of pro-competitive ideology upon a world acclimated to the existing legal and economic order of regulated competition.

The negotiating strategy of the United States was essentially one of "divide and conquer." 99 As deregulation magnate Alfred Kahn responded to British refusal to embrace the United States’ "open skies" ideology, "let’s stick it to the Brits—let’s put pressure on the Germans through Amsterdam." 100 With the opportunity to engage in pricing competition and serve interior U.S. points, Sabena and KLM began to draw traffic away from their neighbors and obtain significant increases in mar-

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99. In 1978, this author suggested a U.S. negotiating strategy designed to remedy the anti-competitive consequences of Bermuda II:

The United States has come strong bargaining weapons to secure a significantly more favorable position than achieved in Bermuda II. It is the largest passenger market in the world, the leading source of tourists, and maintains the largest fleet of aircraft on the planet. In order to secure competitive opportunities for its carriers, the United States must be willing to trade the competitive opportunities necessary to enhance the posture of foreign air carriers. It may be necessary to offer unlimited access to interior U.S. gateways in exchange for unlimited designation of U.S.-flag carriers and downward pricing flexibility.

There remains the possibility of rectifying the deleterious effects of Bermuda II upon competition in the transatlantic market by seeking competitive opportunities elsewhere. Much of the traffic that flows through the London gateway merely employs that point as a conduit through which it acquires access to the European continent; many passengers who have traditionally flown the New York-London route are part of the greater U.S.-European market, and would settle for a point other than London in order to secure access to the continent. Hence, the U.S. may well be able to exploit this phenomenon in order to persuade the British to reevaluate their position. Competitive opportunities stimulated in one market may have a ripple effect that may diminish a neighboring market’s initially obstinate negotiating posture.

Dempsey, supra note 53, at 444 (citations omitted).

100. A. Sampson, supra note 2, at 145.

[7] The U.S. government saw [the new liberal pro-competitive bilateral] as a means of putting pressure on recalcitrant governments in the same geographic area. Thus, under this "encirclement" theory, the United Kingdom was to be pressured by expansion of air service to and via Belgium and The Netherlands. Not too much later a new agreement with South Korea was intended to put pressure on Japan. This campaign for "Open Skies", as it was quickly dubbed, was further stimulated by strong criticism within the United States of the restrictive terms of Bermuda II.

M. Brenner, supra note 75, at 13 (citations omitted).
ket shares and tourist revenue.  

During the ensuing years the approach has succeeded in breaking down some of the restrictions on competition, particularly in northern Europe, although not without meeting serious resistance in southern Europe, much of Asia, and most of Latin America. Between 1978 and 1980, the United States signed eleven new "open skies" Benelux-type bilaterals or amendments to existing bilateral air transport agreements.  

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101. As Alfred Kahn, in characteristic candor, described his response to Bermuda II in these terms:

   Let’s stick to the British. Let’s go and open up competition with the Low Countries who are eager to have competitive opportunities with us, precisely in order to impose leverage on these protectionist countries.

   * * *

   Our doing so, in turn, puts pressure on the Germans, for example. It is clearly putting pressure not merely on our carriers but the French and Italians. . . . [T]hey are coming to us and talking about zones of pricing discretion. Then we say we are going to hang tough, we want genuine opportunities for competition.

   House Hearings on International Aviation, supra note 73, at 961. See id. at 100, n.1. In 1977, Sabena was given the right to fly to Atlanta. No British carriers could begin service under Bermuda II to this important sunbelt city until 1980. Gray, The Impact of Bermuda II on Future Bilateral Agreements, 3 Air L. 17, 21 (1978). One prominent attorney of the era predicted that "a goal of U.S. policy will be to try to create an alternative low-fare gateway to London and use the new U.S. approach of trading 'liberalization for liberalization' in the bilateral field."  

102. While Liberal agreements (not always fully honored by the foreign governments) have been negotiated with the Philippines, the Republic of China, Singapore, and South Korea, access to Japan is the key to the major portion of the U.S.-Far East market. Not only is Japan extremely important in its own right, but most visitors to the area do not want to bypass it. Furthermore, it is strategically located, and distances in the Far East are too great to permit sidetrips to Japan as casual "backhulls." The Japanese government has always been conservative in its civil aviation policies, but has gradually been persuaded to accept more service to and from the United States.


   With the exception of U.S.-Philippines and U.S.-People’s Republic of China, Central Pacific routes are the subject of liberal bilateral agreements. As a result, at least as a technical matter, any U.S. carrier is free to institute service. . . . Apparently as an economic matter, however, most U.S. carriers have not instituted such service. Currently, approximately one-half of the service to Central Pacific points is provided through Japan. . . .

   The South Pacific routes to Australia and New Zealand are entry limited.


103. South American governments . . . always have been and continue to be, highly restrictive, and firmly rejected the Carter Administration’s policy. One probable reason for this, over and above basic philosophy, is concern that their national carriers would be overrun by freely competing U.S. airlines.

M. BRENNER, supra note 75, at 106-07.

   In Latin America, particularly South America, the Carter policy was rejected. There currently remains very little movement away from historic control of competition, capacity, and fares in this market.

id. at 15.

104. Haanappel, supra note 36, at 261. Professor Haanappel has summarized the essential characteristics of these new agreements:

   1. Unlimited multiple designation of airlines;
among the more than 70 nations with which the United States has a bilateral air transport agreement, the following nations are among the members of the world community with which the United States has concluded the most liberal of such bilaterals: Belgium, Costa Rica, Finland, Israel, Jordan, Jamaica, South Korea, Thailand, Taiwan, and Singapore.\textsuperscript{105} Even the U.S.-U.K. bilateral, Bermuda \textit{II}, has since been liberalized.\textsuperscript{106} It

2. a liberal route structure, \textit{i.e.}, U.S. airlines may serve foreign countries from any point in the U.S., via any intermediate point and to any beyond point;
3. free determination by the designated airlines of capacity, frequencies and types of aircraft to be used unhindered by Bermuda I capacity clauses;
4. no limitation on the carriage of sixth-freedom traffic;
5. encouragement of low tariffs, set by individual airlines on the basis of forces of the marketplace without reference to the rate-making machinery of IATA;
6. minimal governmental interference in tariff matters; and
7. inclusion of provisions on charter flights, \textit{i.e.}, the availability of cheap charter air services is encouraged and charterworthiness is governed by the country of origin rule.

\textit{Id.} at 262 (citations omitted).

By 27th August 1981 the U.S. concluded 19 Liberal Bilateral Agreements with Philippine [sic], Fiji, Paepua New Guinea, Republic of Korea, Switzerland, Jamaica, Antilles, Thailand, Israel, Jordan, Federal Republic of Germany, Scandinavian Countries, etc. Varying liberal content was injected in the agreements with Holland, Signapore, United Kingdom, New Zealand, Australia and Japan.

\textit{Impact of Current U.S. Policy, supra} note 98, at 299.

105. Letter from Matthew V. Scoocozza to Paul Stephen Dempsey (Aug. 5, 1985). However, since late 1982, no bilateral as liberal as \textit{Benelux} has been consummated. Professor Hannapel has identified several reasons to explain the receding tide:

It may be becoming increasingly difficult for the U.S.A. to find bilateral air transport agreement "partners" willing to enter into "liberal" agreements. There also seems to have been a U.S. negotiating policy shift away from concluding full-scale "liberal" bilateral air transport agreements and towards more limited agreements taking care of immediate problems. In bilateral negotiations, the financial interests of U.S. air carriers seem to be taken into account now much more than in the late seventies. . . . Increased access for foreign air carriers to U.S. gateways is therefore no longer automatically exchanged for acceptance by foreign air carriers of liberal pricing and charter regimes. There remains, however, considerable concern in the U.S.A. about discriminatory practices against U.S. air carriers abroad, especially in respect of ground handling facilities at foreign airports and access to computer reservation and agency systems abroad.

P. HANNAPEL, AN ANALYSIS OF U.S. DEREGULATION OF AIR TRANSPORT AND ITS INFERENCE FOR A MORE LIBERAL AIR TRANSPORT POLICY IN EUROPE 52 (1984) [hereinafter cited as P. HANNAPEL].

However, under the recently concluded United States-Canada Experimental Transborder Air Services Agreement pertaining to Mirabel, both the U.S. and Canada may designate an unlimited number of carriers to provide combination services between Mirabel International Airport near Montreal and all but seven specified points in the United States. The agreement also includes liberalized pricing provisions. See DOT Order 85-7-1 (1955); DOT Order 86-1-25 (1986).

106. See Agreement on Air Transport Services, Nov. 2-9, 1978, United States-United Kingdom, T.I.A.S., No. 9231; Agreement on Air Transport Services, Apr. 15-25, 1978, United States-United Kingdom, T.I.A.S. No. 8965; Agreement on Air Transport Services, Mar. 17, 1978, United States-United Kingdom, T.I.A.S. No. 8964. As Michael Levine, one of airline deregulation's principal architects, eloquently remarked, "while the international changes, taken as a whole, are less complete and less consistent in their application than those within the United States, they have evolved in a much less homogeneous environment under a regime of multiple sovereigns and evolved at a rate and to an extent which, compared to the norm for change in that environ-
has been suggested that some nations may have been persuaded to accept the U.S. insistence of liberalization of the bilateral agreements even against their better judgment:

A network of over 2500 such Bilateral Air Services Agreements currently regulates and ensures the continuance of air transport between different parts of various countries of the world. The ease with which these bilateral arrangements can be unilaterally dissolved by one state party hangs heavily above them like “Damocles Sword.” Due to the fragility of these Agreements, a state which is indispensably interested in the preservation of an Air Service may find itself under pressure to accept terms offered by the other party which may otherwise be categorised [sic] as onerous or unfair. 107

The new liberal bilateral agreements are characterized by their opportunities for pricing flexibility, 108 unrestricted capacity, 109 multiple designations, 110 access to interior U.S. markets for foreign-flag carriers, 111 some new fifth-

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107. Impact of Current U.S. Policy, supra note 98, at 297-98 [citation omitted].

108. The new bilateral agreements typically provide for either country-of-origin pricing (under which a fare may be unilaterally disapproved only by the state from which the flight originates), or mutual disapproval pricing (under which new fares may be freely inaugurated unless both states disapprove them), the latter being the most liberal of the two. See Rosenfeld, United States Government-Industry Partnership, 16 INT’L LAWYER 473, 478 (1982) [hereinafter cited as Rosenfeld]; Klem & Leister, The Struggle for a Competitive Market Structure in International Aviation: The Benelux Protocols Take United States Policies a Step Forward, 11 L. & Pol’y INT’L Bus. 557, 573-74 (1979) [hereinafter cited as Klem & Leister]. Under a country-of-origin pricing provision, a nation’s right to take unilateral action suspending fares proposed by a carrier is limited to those situations where the the first point in its itinerary is located within its territory. Hence, the foreign government may protect its airline by rejecting a U.S. carrier’s low fare proposals for traffic originating in that nation’s territory. Country-of-origin clauses were incorporated into the new bilateral protocols signed with the Federal Republic of Germany, Peru, and Poland in 1978, and the Netherlands in 1979.

109. “The right to fly any number of seats on any number of frequencies would be determined by the carrier, based solely on market conditions.” Rosenfeld, supra note 108, at 478.

110. Liberal Agreements make capacity provisions flexible by removing restrictions from the number of airlines to be designated, frequency of flights and the size of aircraft. For example, Art. 3 of the [1980] Air Transport Services Agreement between the U.S. and [Jordan], provides that subject to some conditions “Each party shall have the right to designate as many airlines as it wishes to conduct international air transportation in accordance with this Agreement or alter such designations.” Impact of Current U.S. Policy, supra note 98, at 299.

111. Multiple designation involves the ability of a state to name more than a single of its flag carriers to serve a particular route.

For example, direct access to Miami, Atlanta, Dallas/Ft. Worth, San Juan, Anchorage, and San Francisco was given to Germany; Atlanta and three additional cities were conferred to Belgium; and rights between Korea-New York, Korea-Los Angeles, and Tokyo-Los Angeles were given to South Korea. House Hearings on International Aviation, supra note 73, at 108 (statement of William T. Seawell). Another commentator summarized examples of foreign access to
freedom rights for U.S.-flag carriers,\textsuperscript{112} country of origin charter rules,\textsuperscript{113} and elimination of discrimination and unfair methods of competition.\textsuperscript{114}

During the Carter Presidency, the U.S. Civil Aeronautics Board also issued a series of route decisions which contributed to the growing turbulence in international aviation relations. For example, in 1978, the CAB concluded the \textit{Seattle/Portland-Japan Service Investigation}\textsuperscript{115} which authorized a new U.S.-flag carrier, United Airlines, to inaugurate low-fare transpacific service, despite assurances by both the U.S. Departments of State and Transportation that the Japanese governments vigorously opposed the entry of new U.S.-flag entrants or fare decreases in the market.\textsuperscript{116} Later that year, the Board finalized the \textit{Philadelphia-Bermuda Nonstop Proceeding},\textsuperscript{117} in which it issued permissive operating authority in the Philadelphia-Bermuda market to each of the five U.S.-flag carriers which had applied for it, notwithstanding the market's small size (it only generated 47,000 origination and destination passengers),\textsuperscript{118} and vehement objections by the British government.\textsuperscript{119} In spite of a history of

\begin{itemize}
\item interior U.S. points even more generously, by saying that "Germany has rights to 12 U.S. cities and has named 10 thus far, the United Kingdom has rights to name 20 U.S. cities and has listed 17 so far on their major route." \textit{Id.} at 424 (testimony of Donald C. Comish).
\item 112. \textit{Rosenfield, supra} note 108, at 479.
\item 113. Under this provision, charter flights are governed by the rules of the nation in which the flight originates.
\item 114. \textit{Kien & Leister, supra} note 106, at 575-76; \textit{Dempsey, supra} note 53, at 411-15; \textit{Impact of Current U.S. Policy, supra} note 98, at 299-300.
\item 115. \textit{CAB Order} 78-10-42 (1978).
\item 116. \textit{Id.} dissent of Member O'Melia, at 6-7. The majority opinion noted, paradoxically, that "certain constraints in international markets—arising out of the inescapable role of foreign governments—whose attitude toward competition often differs markedly from ours—prevent us from relying on entry as a means of achieving our goals to the same extent as in domestic markets; nevertheless, competition remains the best means of assuring that, on a continuing basis, fares reflect costs and passengers are offered the most desired combination of service and price." \textit{Id.} at 10. The majority went on to dismiss the foreign policy implications of its decision in these terms:

\begin{quote}
We are fully aware of the various diplomatic implications of our decision. However, we are optimistic that the Japanese government will eventually see the mutual benefits that can be derived from fare reductions and more freely competitive international air service. Moreover, in our judgment, it would be undesirable to allow diplomatic uncertainties to prevent our authorizing service that is clearly to the benefit of the public.
\end{quote}

\textit{Id.} at 14. This optimism was misplaced, however. By the mid 1980's the Japanese government had still not been fully convinced of the wisdom of following the CAB's enlightened pro-competitive aviation policy.
\item 117. \textit{CAB Order} 78-12-192 (1978).
\item 118. \textit{Id.} dissent of Member O'Melia, at 3.
\item 119. \textit{Id.} at 9. In a sense, the Board seemed determined to capitalize on the absence of restraint required by \textit{Bermuda II}:

This is an international route subject to a recently negotiated bilateral agreement which permits the multiple designation of U.S. carriers, and therefore presents a valuable opportunity to implement international aviation policy which should not be lost. We have noted our disagreement with the restrictive covenants in \textit{Bermuda II}, but in this case;

\begin{quote}

\end{quote}

\end{itemize}
stormy aviation relations with Peru, the CAB in 1979 inaugurated the United States-Peru Case, in which it determined that new competitive U.S.-flag carriers should be authorized to serve the market. In the France Show Cause Order, the CAB invited all interested parties to be certificated to serve France, despite that government's strong opposition to multiple entry. And in a number of other international route proceedings, the CAB expanded its domestic policy of issuing multiple permissive awards of operating authority to all carriers which requested it to a wide variety of international aviation markets, irrespective of their size or foreign opposition. The Board criticized the traditional regime of economic regulation as reflecting "mercantilism," where a quid-pro-quo balance of airline interests in international aviation had been promoted over the interests of consumers, who had been allegedly denied the benefits of pricing and service competition, while airlines had grown increasingly lethargic and inefficient. The modern approach of the U.S. government

Bermuda II gives us the latitude to use more competitive tools to shape the system of U.S.-U.K. air service.

Id. at 8 (citation omitted). CAB Member O'Melia filed a vigorous dissent, which began by stating, "This Philadelphia-Bermuda case may well come to represent in the eyes of the international aviation community the classic case study of how an agency's fixation with a notion—hoisted to the status of a doctrine—can cause it to cast away all considerations of statutory constraints, intergovernmental sensitivities, procedural orderliness, and practical consequences." Id. dissent of Member O'Melia, at 1.

The opposition of the British government to multiple awards was turned on its head with the Board, in a subsequent proceeding, cited Philadelphia-Bermuda as reflecting the notion that the Board would grant "the broadest possible international authority when foreign governments were receptive to our multiple-award philosophy." U.S.-Bahamas Service Investigation, CAB Order 79-8-68 (1979), at 4. In still another proceeding, the CAB reasserted its alleged devotion to harmony in foreign relations by saying, "Naturally, we must consider foreign policy questions, particularly the aviation attitudes of other nations, in deciding international licensing cases." United States-Central American Show Cause Proceeding, CAB Order 79-11-87 (1979), at 9.


121. The majority opinion revealed the temerity of the CAB's pro-competitive policy: "[W]e cannot ignore the turbulent history of our aviation relations with Peru... [W]e cannot assume that the Peruvian authorities will be receptive to a multiple-entry policy for U.S.-flag carriers, notwithstanding that multiple designations are permissible under the bilateral agreement." Id. at 4.

122. House Hearings on International Aviation, supra note 73, at 37 (statement of C.E. Meyer, Jr.).

123. See Las Vegas-Dallas/Fort Worth Nonstop Service Investigation, CAB Order 78-7-116 (1978); P. Dempsey & W. Thoms, supra note 1, at 121-127.


125. In the Benelux Exemptions Case, CAB Order 78-9-2 (1978), the Board eloquently expressed its criticism of the existing regulation regime by noting that:

The prevailing attitude and practice abroad is protection from competition. As a conse-
was to be quite different:

The policy of our government is to trade liberalizations rather than restrictions, offering access to U.S. markets in return for guarantees of pro-competitive rates with respect to pricing, capacity, and other economic decisions by the carriers of all states. The underlying premise is that expansion of competitive opportunities for all carriers—foreign as well as U.S.—benefits everyone, particularly the consumer. This has been the domestic experience, and it is equally applicable internationally, if governments will allow. 126

Needless to say, many nations not only opposed the “open skies” policy on philosophical grounds but resented the means by which the United States unilaterally foisted it upon them.127 One commentator sum-

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127. For example, Michael E. Levine, Director of the CAB’s Bureau of Pricing and Domestic Aviation during the Carter Administration, wrote a confidential memorandum in 1979 in which he proposed the following negotiating strategy for imposing the “open skies” ideology upon Europe:

“We are not particularly anxious to achieve a written agreement with Holland or Italy until the timing is correct and our leverage allows us to assure their acquiescence in a liberal agreement. We believe that additional pressure can be placed upon Italy and France through whatever increased competition may be negotiated with Greece, Spain, Portugal, and possibly Yugoslavia. It seems clear that France intends to protect its gateway and will continue to “play” to some extent...but that further market pressure is required to get France to permit (either de facto or in writing) the emergence of a competitive environment.

[The Summer of 1979] will be the first market test of a meaningful level of new competition on the North Atlantic, and we believe that if it succeeds the summer experience alone may provide the necessary economic incentives for recalcitrant countries to become less protectionist..."

We believe that denunciation can be a useful strategic tool which should be used where advantageous. For example, we should consider denunciation very seriously if no further progress is forthcoming on the removal of Bermuda 2 restrictions or our problems with the Italian bilateral. Such steps would assist us in our negotiations in other parts of the world, such as Australia, New Zealand and Japan. There is political merit in the argument advanced by DOS that the U.S. might be successfully charged with racism or imperialism if the first bilateral the U.S. denounces is with a country without a predominantly European background or one which is very much less economically developed than we are. If we first denounce an agreement without European brethren, other nations more remotely related to the U.S. should correctly interpret this as a signal that the U.S. is now willing to denounce bilateral civil aviation agreements.
marized the undiplomatic implementation of U.S. policy and the strong resistance these efforts generated abroad:

It was, indeed, nothing but arrogance on the part of U.S. policymakers who seriously planned to coerce, albeit by passive means, other nations of the world into the adoption of the U.S. policy. Preference of this approach, instead of . . . striving for a coordinated international aviation policy through discussions with other nations and with due respect to their rational, reasonable and legitimate proposals and concerns, seems to have its inspiration in the fact that the United States is the strongest aviation nation in the world, a criterion which is devoid of a core of legitimacy to any rational jurist. A confidential memorandum of the CAB discloses the negotiating strategy in the Carter era whereby . . . it was assumed that if a “broad authority” was conferred on small aviation countries which were not able to grant reciprocal trade or other commensurate aviation benefits to American firms, it would result in major countries changing their aviation policies and “surrendering to the U.S.”128

B. The Rate Revolution: Pricing Competition, IATA and Antitrust Immunity

Prior to deregulation, most of the pricing competition over the North Atlantic was stimulated by charter or supplemental carriers129 (with their


129 This study does not emphasize supplemental or charter air transportation. The term “supplemental air transportation” is defined by 49 U.S.C. § 1301(34), as charter trips performed in air transportation pursuant to a certificate of public convenience and necessity authorized 49 U.S.C. § 1471(d)(3), to supplement the scheduled air transport services of carriers holding certificates of public convenience and necessary under 49 U.S.C. § 1371(d)(1) & (2). See also 49 U.S.C. § 1371(n).

frequently ignored affinity group and travel restrictions,\textsuperscript{130} and Loftleidir Icelandic (a non-IATA carrier which flew from the United States to tiny Luxembourg via frigid Keflavik Airport in Iceland).\textsuperscript{131} With the United States' unilateral insistence on pricing competition and the CAB's assault on IATA (to be discussed momentarily), the competitive pricing innovators initially became Britain's Laker Skytrain (the product of flamboyant Sir Freddie Laker)\textsuperscript{132} and America's Air Florida (which had the unfortunate

mental and charter operations have become much less significant in U.S. international aviation in recent years.

Hence, "direct" air carriers (\textit{i.e.}, those engaged in the operation of aircraft, 14 C.F.R. § 296.1(d) performing scheduled operations in foreign commerce in the transportation of passengers pursuant to a certificate of public convenience and necessity, issued under 49 U.S.C. § 1371(d)(1) (1970), or pursuant to a permit issued under 49 U.S.C. § 1372(b) (1970), will be emphasized herein.

\textsuperscript{130} At first, beginning in 1953, IATA had enforced a rule that charter or non-sked flights across the Atlantic could only be permitted for groups and clubs with an authentic "affinity"—whether ethnic relationships, hobbies or staff associations. But a whole industry sprang up to devise and advertise debus clubs which could qualify for bargain fares, and the game reached a farcical climax in 1971 when an American group called the Left Hand Club was raided on their aircraft, and a quarter of them were found to be spurious members and taken off the plane. The public still insisted on any kind of charter, the affinity rules proved impossible to enforce and were abandoned, and the scheduled airlines competed with their own advanced booking fares.

A. SAMPSON, supra note 2, at 11-12.

The authorized discount travel plans that had theretofore existed included various restrictions that made them relatively less attractive to certain travellers: low-cost air transportation frequently required (a) advance booking and ticket purchases, (b) participation in an organized tour program, (c) round-trip ticket purchases with inflexible minimum and maximum lengths of stay, or (d) membership in a particular affinity group. Dempsey, supra note 53, at 403.

\textsuperscript{131} A. SAMPSON, supra note 2, at 108.

\textsuperscript{132} id. at 147-62. Skytrain was a single-class air shuttle charging the lowest scheduled New York to London air fares ever offered. Laker offered no "frills" on the Skytrain service: tickets were sold at the airport six hours prior to departure on a first-come-first-served basis; meals were not included in the ticket price, but were provided at a supplementary charge. There were numerous obstacles to approval of this revolutionary concept on both sides of the Atlantic.

In 1972 the British Civil Aviation Authority [BCAA]—the counterpart of the CAB—issued a license to Laker to operate the Skytrain service between London and New York. BCAA License No. A, 14011, published in the CAN Serial No. 30 part III A (Oct. 18, 1972); BCAA Air Operators Certificate No. 348/5/1 (Nov. 26, 1972); both are on file with the U.S. Department of Transportation in Docket 25427 (Laker Exhibits). The license issuance was in response to Laker’s application No. A 12449 filed with the British Authorities on June 15, 1971. id. The British authorities denied the application on February 19, 1971. id. Laker’s appeal was heard by Sir Dennis Proctor, KCB, on February 9, 1972, who recommended that the appeal be allowed. Commissionner’s Report dated February, 1972. id. But the British Secretary of State concluded that the appeal should be dismissed so that issues raised by Laker’s proposals could be considered by the BCAA. Secretary of State letter to BCAA dated March 30, 1972. id. The BCAA, on September 26, 1972, granted Laker a ten year license. The British government then formally notified the United States of its designation of Laker to operate the London-New York route specified under the 1946 Air Service Agreement Between the United States and the United Kingdom [Bermuda I].

In 1973 Laker applied to the CAB for a scheduled foreign air carrier permit, pursuant to section 402 of the Federal Aviation Act of 1958. But while the application was awaiting disposi-
fate of crashing into a bridge in the heart of the world’s media mecca, Washington, D.C.).\textsuperscript{133} In the early 1980s, these two discount leaders met their unhappy demise in bankruptcy, only to be replaced with a new generation of bargain basement carriers: America’s short-lived People Express\textsuperscript{134} and Britain’s Virgin Atlantic.\textsuperscript{135}

In the proceeding before the BCAA in which British Airways sought the revocation of Laker’s Skytrain license on the grounds that it would create a substantial diversion of traffic from established scheduled carriers, it was argued that: (1) transatlantic air traffic between the United States and the United Kingdom was steadily decreasing; (2) operating costs, particularly fuel costs, had increased so significantly that transatlantic operators were faced with substantial pecuniary losses; as a consequence, they had, with inter-governmental support, reduced capacity between New York and London; and (3) given this economic environment, it was doubtful that the market for which Skytrain was initially licensed in 1972 still existed. In response, Laker argued that no man may be deprived of its property without due process of law, and contended that a depressed economic environment on the North Atlantic did not constitute due process. Coleman, Laker Warns of Huge Losses in Skytrain Permit Dispute, AVIATION WEEK & SPACE TECHNOLOGY, Jan. 27, 1975, at 27.

Laker successfully challenged the action of the Board of Trade in the British courts. On December 15, 1976, the Court of Appeal rendered a judgment in favor of Laker, effectively revoking its U.K. license to operate the Skytrain service. The British civil aviation policy of establishing “spheres of influence” to eliminate competition between British air carriers was directly challenged by the ruling, which declared that the British Trade Minister could not lawfully cancel the Skytrain license held by Laker Airways. U.K. Court Rules in Favor of Skytrain, AVIATION WEEK & SPACE TECHNOLOGY, Aug. 9, 1976, at 32. Britain’s Labour government decided not to appeal the decision to the House of Lords, thereby removing the final legal impediment on the European side of the Atlantic to the institution of Laker’s Skytrain service. British Government Not to Appeal Laker Ruling, AVIATION WEEK AND SPACE TECHNOLOGY, Feb. 21, 1977, at 25. See Memorandum from British Embassy, Washington, D.C. (Feb. 18, 1977), in appendix to CAB Order 77-3-40 (1977). See also Statement by the Secretary of State for Trade (Mr. Edmund Den) in the House of Commons (Feb. 14, 1977), id. Dempsey, supra note 53, at 400-401.

President Carter approved Laker’s plan in June of 1977, and scheduled service began on September 27, 1977. Id. at 406. London for Only $236, TIME, June 27, 1977, at 63; Parke, Transatlantic Shuttle, FLYING, Apr. 1975, at 5.

133. A. Sampson, supra note 2, at 137, 143, 211, 215.

134. Id. at 16, 137-40, 214-17. In 1985, People Express was given authority to operate between a point or points in the United States and Shannon, Ireland, and a point or points in Belgium, the Federal Republic of Germany, Luxembourg, the Netherlands and Switzerland. DOT Order 86-1-52 (1986). It had previously been granted temporary authority to operate between Newark, N.J., and London, between Newark and Zurich and Brussels, and between San Francisco and Brussels. DOT Order 83-5-60 (1983); DOT Order 85-7-9 (1985); DOT Order 85-8-76 (1985); DOT Order 85-11-26 (1985).

135. A. Sampson, supra note 2, at 209, 217, 223.
The advent of deeply discounted air fares owes its stimulus to the policy initiatives of the U.S. Civil Aeronautics Board. As CAB Chairman Alfred Kahn remarked, "I have only to open my mouth, and the fares come tumbling down." The CAB inaugurated a general policy of pricing flexibility and of favoring low-fare proposals:

It is our policy—both domestically and internationally—to develop a system of air transportation that places principal reliance on actual and potential competition to determine the variety, quality and price of air service. Essential components of this policy are greater competitive opportunities for airlines and the promotion of low-fare transportation options for travelers and shippers.137

The Board favored a plethora of low-fare proposals establishing a labyrinth of discount possibilities for both domestic and international travelers.138 Its general policy of encouraging low-fare experimentation139 was based upon the theory that carriers should be given freedom from regulatory constraints in exercising their commercial judgment to improve their competitive positions.140 The Board was strongly committed to the encouragement of innovative low fares and welcomed proposals offering different price/quality options.141 The CAB’s philosophy was "that com-

136. Id. at 136.
137. United States-Benelux Low-Fare Proceeding, CAB Order 78-6-97, at 5 (1978). Conversely, the CAB was aggressive in suspending, investigation and disapproving proposed increases in international fares. See, e.g., CAB Order 78-10-143 (1978), and CAB Order 78-9-38 (1978).
138. For example, the CAB permitted the institution of "super-jackpot" fares, CAB Order 78-3-70 (1978), and CAB order 77-11-123, "super saver" fares, CAB Order 78-4-71 (1978), and CAB Order 78-5-159 (1978), "senior saver" fares, CAB Order 78-4-102 (1978), "inclusive tour" fares, CAB Order 78-1-79 (1978), "home free" fares, CAB Order 78-1-133 (1978), "no strings" fares, CAB Order 78-6-98 (1978) and CAB Order 78-3-106 (1978), "new low" fares, CAB Order 78-2-59 (1978), and various other low-fare proposals. See e.g., CAB Order 78-4-84, at 3 (1978), and cases cited therein. It also instituted various route proceedings in which low-fare proposals were determinative. See, e.g., Chicago-Albany/Syracuse-Boston Competitive Service Investigation, CAB Order 77-12-50 (1977); Baltimore/Washington-Houston Low Fare Route Case, CAB Order 77-12-115 (1977); and California-Nevada Low Fare Route Proceeding, CAB Order 77-10-136 (1977).
141. CAB Order 77-12-14 (1977). This policy was specifically extended to international markets. See CAB Order 77-12-148, at 4 (1977). The CAB encouraged the submission of low-fare proposals designed to stimulate traffic in markets where low load factors predominate. CAB
petition is a more efficient price regulator than government, and that excessively high prices can be inhibited effectively by the presence of aggressive competitors or the threat of entry.142

The Carter Administration and its Civil Aeronautics Board implemented several means of stimulating pricing competition in international markets:

- Bilateral negotiations attempted to reduce the authority of governments to interfere in pricing.
- Charters, which typically offered lower prices, were made more accessible to the general public by easing restrictive charter regulations.
- In selecting U.S.-carrier applicants to serve routes where foreign governments limited the number of U.S. carriers, there was a strong bias in favor of the applicant proposing the lowest fare package.
- In mid-1978, the CAB started an investigation into its continued approval of the very concept of IATA rate-making, by proposing to withdraw anti-trust immunity.143

While decisions to open wide the floodgates of entry144 caused certain foreign governments some measure of consternation,145 nothing in

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Order 78-6-99, at 2 (1978). The Board appeared unwilling to suspend or investigate decreased fares in international markets despite the complaints of competing carriers that such low fares were predatory. See e.g., CAB Order 78-4-98 (1978); CAB Order 78-3-39 (1978).


143. M. BRENNER, supra note 75, at 15. Specifically, the objectives of the United States in international air transport agreement negotiations were summarized by CAB Chairman Alfred E. Kahn as follows: (1) eliminate anticompetitive restrictions on charters and supplemental carriers; (2) expand opportunities for new low-fare scheduled service; (3) obtain maximum access to markets by expansion of the number of nonstop U.S. gateways; (4) secure an adequate number of multiple carrier designations; (5) avoid restrictions on capacity and frequency; and (6) acquire maximum flexibility for U.S.-flag air carriers to operate in intermediate and beyond points. INT’L AVIATION NEGOTIATION, supra note 65, at 95. See also INTERAGENCY COMMITTEE ON INT’L AIR TRANSPORTATION POLICY, U.S. POLICY FOR THE CONDUCT OF INT’L AIR TRANSPORT NEGOTIATIONS (1978). These policies have been described by IATA as "a strong call for international deregulation, emphasizing increased competition, multiple designation of carriers, liberalization of charter operations, no capacity constraints and ‘marketplace pricing’ with minimum governmental involvement," and have been characterized as a "bewildering blend of liberal idealism and commercial market share policy." INT’L AIR TRANSPORT ASSN., THE STATE OF THE AIR TRANSPORT INDUSTRY 5 (1978). Dempsey, supra note 53, at 442.

144. For a comprehensive summary of the deregulation of airline entry in the domestic context, see THE RISE & FALL OF THE CIVIL AERONAUTICS BOARD, supra note 52.

145. The prevailing attitude of foreign governments has been to restrict competition through means of regulated pricing and limitations on carrier entry.

The exchange of air transport rights has for the most part been conducted in an atmosphere of mercantilism, with countries attempting to gain as much as possible for their carriers while giving up as little as possible to the carriers of the other. The air has been, and continues to be, in too many instances, a strict bilateral balance of accounts. The big loser has been the consumer, whose choice of airlines and prices has been artificially restricted, and who has all too often in consequence had to pay monopolistic prices or, at best, to conform to complex and vexatious restrictions—e.g., on length of stay—in order to qualify for fares closer to the cost of providing the service efficiently.
the history of international aviation generated more vehement opposition than the CAB's tentative decision in 1978 to strip the International Air Transport Association\textsuperscript{146} of its antitrust immunity.\textsuperscript{147}

The inability of the world's aviation community to achieve a multilateral regime of economic regulation after World War II led to the Bermuda I abdication of ratemaking to the conference rate machinery of the airline consortium: IATA. In the negotiations, Britain dropped its insistence that the number of flights be limited, and the U.S. accepted the IATA Collective ratemaking mechanism.\textsuperscript{148} The first antitrust exemption was granted to

\begin{flushleft}
By insulating the carriers from the pressures of competition, these policies have also sheltered and encouraged inefficient operations, thereby increasing the pressure for further government protection and subsidization. CAB Order 78-9-2, at 6 (1978).

146. IATA is the world organization of scheduled air carriers that transport the bulk of the scheduled domestic and international air traffic under the flags of some 85 nations. IATA is also the forum for the negotiation of international fare and rate agreements. INTERNATIONAL AIR TRANSPORT ASSOCIATION, WORLD AIRLINE COOPERATION 3 (1977). Representatives of six airlines met in the Hague, the Netherlands, on August 25, 1919, to establish the International Air Transport Traffic Association, forerunner of the present IATA. IATA, 50 YEARS OF WORLD AIRLINE COOPERATION 2 (1969). A. Sampson, supra note 2, at 38. During its first decades, the Association made decisions regarding safety, standardization of aircraft design and construction, inflight communications and navigation. IATA, WORLD AIRLINE COOPERATION 3 (1981). By the mid-1930s, it had grown to an organization of 29 carriers. IATA, TRENDS IN INTERNATIONAL AVIATION AND GOVERNMENTAL POLICIES 6-7 (1979). The association lay dormant during World War II until, in April 1945, its successor, the International Air Transport Association, was born in Havana, Cuba. Today, IATA is comprised of more than 100 member airlines, and has headquarters in Montreal and Geneva.

IATA performs a number of functions on behalf of its members, including \textit{inter alia}, handling interline accounts among carriers, lobbying for lower taxes, urging international security standards, compiling and disseminating information, providing data processing equipment and programs, and disseminating public relations materials. IATA, WORLD AIRLINE CORPORATION 5-14 (1981). By the late 1970s, IATA was comprised of 112 scheduled airlines form 90 nations. \textit{House Hearings on International Aviation}, supra note 73, at 905. IATA Director General Knut Hammarskjold described the organization's principal contributions to cooperation in international aviation in these terms:

\begin{quote}
[Complex interline facilities have been established which permit travelers to buy one ticket in one currency at one time for any number of connecting flights on different airlines. IATA also establishes standards and procedures for the appointment of travel agents and their relations with airlines, thus saving the costs of each airline doing this individually and giving travelers the assurance of dealing with qualified travel professionals. As one integral part of these activities, IATA provides member airlines a multilateral forum in which their individual tariff proposals are coordinated for presentation to governments.
\end{quote}

\textit{Id.} at 867-68.

147. For a general discussion of IATA's role in international aviation and the potential effect of withdrawing its antitrust immunity, see Haanappel, \textit{International Air Transport Association: Quo Vadis?}, in \textit{INTERNATIONAL AIR TRANSPORT: LAW, ORGANIZATION, AND POLICIES FOR THE FUTURE} 67 (N. Matte ed. 1976). For a succinct discussion of the political opposition the CAB's action engendered, see A. Sampson, supra note 2, at 144-45.

148. \textit{The Ins and Outs of IATA}, supra note 24, at 1115.
IATA by the CAB under section 412 of the Federal Aviation Act in 1946. At that time, the Board sought to avoid unilateral control by foreign governments over the rates charged by U.S.-flag carriers operating in international transportation. Yet the only statutory power it then held over such rates was certain limited authority to remove discrimination and to approve or disapprove agreements between carriers affecting air transportation. It was not until 1972 that Congress conferred to the CAB jurisdiction over the investigation, suspension, and cancellation of tariffs containing an unlawful fare or rate in foreign air transportation. The earlier inability to suspend the investigation of international tariffs led the Board, in 1946, to approve the IATA rate mechanism. Approval was extended on numerous occasions, and the temporal limitations were ultimately lifted in 1955.

Governmental approval of an agreement under the Federal Aviation Act section 412 may confer antitrust immunity thereto by virtue of section 414 of the Act. Consequently, although price-fixing is a per se violation of the Sherman Act, the continued approval of IATA agreements by the CAB excluded air carriers that engage in such anticompetitive practices from antitrust scrutiny. The expansion of the Board's jurisdiction in 1972 enabled it to exert much the same ratemaking authority over international aviation it had theretofore exercised domestically. The CAB belatedly perceived this statutory change to eliminate the necessity of continuing the immunity which had for more than three

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150. IATA Tariff Conference Resolution 6 C.A.B. 639 (1946). The Board, at that time, believed that conference of immunity to IATA was "the only opportunity available to it under existing legislation." Id. at 645.
155. 6 C.A.B. at 646. In granting the approval, the CAB requested that Congress amended the Federal Aviation Act to give the Board expanded jurisdiction over international fares and rates. Id.
156. See CAB Order 78-6-78, at 1, n.1.
157. Id. See also, Edles, IATA, The Bilaterals and International Aviation Policy, 27 FED. B.J. 291, 293 (1967) [hereinafter cited as Edles].
161. CAB Order 80-4-113 (1980).
162. IATA, AIRLINE Deregulation 16-17 (1985). The following governments, government
decades shielded IATA's consensual decisionmaking activities from per se review under the Sherman Act.\textsuperscript{163}

Without advance notice or consultation with foreign governments, the U.S. Civil Aeronautics Board in June of 1978 tentatively decided to withdraw antitrust immunity from IATA Traffic Conference Resolutions and related agreements, and issued an Order to Show Cause why that decision should not be made final.\textsuperscript{164} Alfred Kahn described IATA as a "smoothly organizations, and governmental agencies opposed the CAB's proposed removal of IATA's antitrust immunity:

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GOVERNMENTAL ORGANIZATIONS

Arab Civil Aviation Council
European Civil Aviation Conference
African Civil Aviation Commission
Latin American Civil Aviation Commission
International Civil Aviation Organization

U.S. EXECUTIVE DEPARTMENTS

Department of State
Department of Transportation

\textit{House Hearings on International Aviation}, supra note 73, at 903.

\textsuperscript{163} See generally, Hammarskjold, \textit{One World or Fragmentation: The Toll of Evolution in International Air Transport}, 9 ANNALS OF AIR & SPACE L. 79 (1984). There was also European concern over "the chaotic position of huge over-capacity on the North Atlantic marked by cutthroat competition involving marginal or even below-cost pricing and the consequent financial losses on a scale which threatened the survival of many airlines and the loss of public investment." McMahon, \textit{Air Transport Regulatory Developments}, ITA MAGAZINE, March 1985, at 7, 8.

\textsuperscript{164} IATA Director General Knut Hammarskjold described the international response to the CAB's Show Cause Order as "the strongest outcry from governments in the world's aviation history." \textit{House Hearings on International Aviation}, supra note 73, at 871-72. "Foreign governments objected not only to the substance of the order but to the fact that the CAB was proposing a fundamental change in the structure of international aviation without seeking to negotiate that change with other sovereign powers." These unilateral actions of the CAB caused foreign governments to claim ". . . breaches of sovereignty, comity, and custom." \textit{id.} at 872. Ham-
oiled price-fixing cartel,” and labeled IATA’s participants as “protectionists and cartelizers.”165 Others cursed it as “one of the most hated car-

Hammarskjöld continued: “My concern—and I believe that of most other governments—relates to the failure of the [Carter] Administration to acknowledge that other countries have legitimate differences of view and that the accepted way of resolving differences—particularly for a major aviation country—is through cooperation, consultation, and negotiation.” Id. at 875.

165. House Hearings on International Aviation, supra note 73, at 870-71. Turning his comments to the IATA Show Cause Order, Hammarskjöld noted:

Other actions of the U.S. were directly confrontational, because they sought unilaterally to set new rules of the game.

The prime example is the well-known show-cause order of the Civil Aeronautics Board issued in June 1978. Without advance warning or attempt to discuss with foreign governments, the Board demanded that IATA show cause why the CAB should not withdraw approval and antitrust immunity from a substantial portion of IATA’s activities, which the CAB had sanctioned since 1946. The order, even though subsequently narrowed in scope and despite later attempts to consult with foreign governments, elicited the strongest outcry from governments in the world’s aviation history.

Id. at 871-72. “Much of the rest of the world perceives that the U.S. acted irresponsibly in implementing its procompetitive international aviation policy.” Id. at 877. British Airways echoed these sentiments in very strong language:

[T]here has been a sharp international reaction against the U.S. policy of promoting competition on international air routes, at least as it has been administered in the recent past. Foreign countries understandably have resented being preached to and reproached by U.S. officials about their lack of enthusiasm for unrestrained competition with the U.S. airline behemoths.

Many other nations hold different perspectives which, of course, are equally valid in their eyes. It is therefore important to preserve, not destroy, an institution like [IATA] which has been the principal forum in which pragmatic compromises have been reached to enable competing philosophies to coexist. To the extent that there is a coherent worldwide system of international air transportation, it is primarily the result of agreements reached within IATA. In the absence of a substitute for IATA—some sort of GATT of the international airlines—the attacks upon this institution by a number of U.S. officials must be viewed as one of the more perverse excesses of U.S. competition policy.

Id. at 1237-39.

IATA has generally opposed unilateral U.S. efforts to export its deregulation philosophy. As IATA Director George R. Besse said, “In many countries, airlines are not only economic tools . . . they are tools of prestige, of privilege. There is a social and political order connected with running an airline, and like it or not, that’s the way it is. Although what the U.S. does affects nearly everyone else, they have to learn that their way is not everybody’s way.” Deregulation Drive Stalls Out at IATA General Meeting, TRAFFIC WORLD, Nov. 12, 1984, at 44.

IATA Director General Knut Hammarskjöld echoed these sentiments, warning against “the trend toward fragmentation of the world-wide, integrated, multilateral system.” Id. He noted that “we should never lose sight of the fact that a global air transport system is an interwoven, interdependent network. If so, the result will be a decline in the cohesion of the system, with serious implications in many respects for international travelers and shippers.” Id. For a comprehensive summary of the arguments in favor of and opposed to the IATA Show Cause Order, see Magdelenaft, The Story of the Life and Death of the CAB Show Cause Order, 2 AIR L. 83 (1980) [hereinafter cited as Magdelenaft].

Many domestic commentators have also complained of the arrogance exhibited by governmental officials during the Carter Administration’s implementation of U.S. international aviation policy. Rep. Bill McEwen (R-Ohio) remarked of CAB Chairman Marvin Cohen’s attitude toward U.S.-flag carriers, “I have never before witnessed such expressions of contempt or utter disdain for American job providers, [and] American carriers by any agency of the Federal bureau-
tels in the world."166

By 1980, IATA had reorganized itself into a two-tier structure, designed to ameliorate the wrath of the CAB. Henceforth, it would be comprised of a Trade Association for activities other than ratemaking and a Traffic Conference for ratemaking activities.167 Membership in the former would be mandatory; participation in the activities of the latter would be discretionary. Carriers choosing to participate in the Tariff Conference would be free to introduce unilateral fares. The reorganization removed two of the most troublesome aspects of the IATA Conference machinery: compulsory participation in the price-fixing conferences and the traditional unanimity rule of the decisional process. The CAB seemed unimpressed by the changes and proceeded to threaten revocation of the antitrust immunity shield.

A thundering storm of protests was filed by 46 governments individually, by 65 nations through international organizations, the U.S. Departments of State and Transportation, and several international organizations, including the ICAO.168 Essentially, these parties objected to the potential extraterritorial application of U.S. antitrust laws should the Show Cause Order become final.169 The harsh criticism leveled by IATA Director General Knut Hammarskjold was typical of the emotional rhetoric of the time:

Foreign attitudes about aviation competition differed from those of the U.S. before 1978, but the divergence was radical after that.170

** *

[O]ne might have expected the U.S. . . . to have pursued its goals with some caution in order not to scare off the rest of the world. However, the new U.S. policy was pursued internationally with what can only be described as messianic fervor. U.S. officials proclaimed that deregulation was best for all countries and all consumers. They implied that foreign resistance arose

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167. H.R. 4209.


170. ECAC was formed in Strasbourg in 1954 to coordinate intra-European air services. See A. SAMPSON, supra note 2, at 98. Today, it is headquartered in Paris. It represents the civil aviation administrations of the governments of 22 West European nations. McMahon, Air Transport Regulatory Developments, ITA MAGAZINE, Mar. 1985, at 7, 8.
for selfish, protectionist reasons or—worse—from lack of intellectual capacity to understand the issues. Whether true or not, these are not messages designed to endear others to one's point of view. Additionally, a carrot-and-stick approach was used for seeking agreements with foreign countries. The carrot was route rights in the U.S. in exchange for acceptance of U.S. philosophies. The stick was the threat of refusal of cost-related fare increases or geographic leverage on countries.

There has also been a suspicion abroad—as paradoxical as it may seem—that the U.S. was indifferent to the welfare of its own industry and hence could hardly be expected to be concerned about the welfare of any other nation's industry.

The inevitable result of messianic fervor is confrontation, and the implementation of U.S. aviation policies internationally from 1978 until recently created such confrontation.\textsuperscript{171}

The intensity of the diplomatic pressure eventually led the CAB to narrow its investigation to the ratemaking activities of U.S.-flag carriers in the North Atlantic market.\textsuperscript{172}

Opposition to the Board's temerity was growing domestically as well. Congressman Elliott Levitas (D-Ga.), an influential member of the House Committee on Public Works and Transportation, succeeded in attaching an amendment to the Transportation Appropriations Bill for fiscal year 1982\textsuperscript{173} prohibiting the CAB's implementation of its IATA Show Cause Order. And President Reagan in mid-1981 informed the CAB that, "it would be appropriate and in the best interest of our foreign policy that the Board extend the effective date of its decision . . . so that our continuing efforts to maintain foreign government cooperation as we rebuild our Air Traffic Control System will not be adversely affected."\textsuperscript{174}

\textsuperscript{171} CAB Order 82-1-31 (1982). \textit{House Hearings on International Aviation}, supra note 73, at 1207-08.


\textsuperscript{173} Born in 1938, the Civil Aeronautics Board died (under the terms of the Airline Deregulation Act of 1978) on midnight December 31, 1984. \textit{See text accompanying notes 631-32, infra}. The final gasp of air for the Civil Aeronautics Board as it laid on its deathbed was its Press Release of December 31, 1984, in which it quoted an appropriate poem:

\begin{quote}
Do not stand at my grave and weep; I am not there, I do not sleep. I am a thousand winds that blow; I the sunlight on ripened grain; I am the gentle autumn's rain. When you awaken in the morning's hush, I am the swiftly passing rush of quiet birds in circle flight. I am the soft stars that shine at night. Do not stand at my grave and cry; I am not there. . . . Goodbye.
\end{quote}

Unknown.


\textsuperscript{174} Nations signing the agreement have agreed not to reject transatlantic fares which fall within the "zone of reasonableness," a specified percentage above and below a referenced rate. \textit{U.S., ECAC Sign Atlantic Fare Pact, AVIATION WEEK & SPACE TECHNOLOGY}, Oct. 22, 1984, at 33. The MOU was signed by Belgium, Denmark, France, West Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the U.K., the U.S., and Yugoslavia. \textit{U.S.-European Carriers Extend Agreement on North Atlantic Fares, AVIATION WEEK}
With this unparalleled uproar, the Board thrice postponed the effective date of its final order in the IATA Show Cause proceeding. The first was ostensibly prompted by the Air Traffic Controller Strike of 1981; the second, by the consummation of A Memorandum of Understanding (MOU) between the U.S. and the European Civil Aviation Conference (ECAC) which established a zone of pricing flexibility for transatlantic fares. In 1982, the Board issued an order postponing its tentative conclusions indefinitely. The United States was spared further embarrassment when the CAB submitted to euthanasia by sunseting at midnight on December 31, 1984, chronically constipated by the IATA Show Cause Order. By the Spring of 1985, the United States and ECAC signed an agreement extending the MOU for another two years, thereby postponing once again the final day of reckoning. And in May of 1985, the U.S. Department of Transportation brought this ugly saga to a graceful conclusion (not with a bang, but with a whimper) by simply terminating the seven

175. DOT Order 85-5-32 (1985). The U.S. Department of Transportation has since pointed out that the ability of IATA to control pricing behavior of airlines is extremely limited: It is difficult for IATA, through its price fixing activities, to affect capacity and achieve joint profit maximization, since differences exist among firms in objective economic factors (e.g., unit cost differences) and subjective and behavioral criteria (e.g., uncertainty about the level of the future demand or corporate objectives besides profit maximization). W. Gellner, *Competition Among the Few*, pp. 142-174 (1965). For more recent discussions of these issues, see F.M. Scherer, *Industrial Market Structure and Economic Performance*, pp. 199-228 (second edition 1980); and Richard A. Posner, *Antitrust Law: An Economic Perspective*, pp. 39-77 (1976).


179. Id. § 1502(b). The new legislation also created a zone of pricing flexibility permitting virtually unregulated pricing in a range from 5% above to 50% below an annually designated standard.

180. M. BRENNER, supra note 75, at 15. "In extending the pro-competitive policy statement of the 1978 domestic Deregulation Act to international service, Congress recognized that the existence of a free and open international marketplace could not be assumed, and added new protective language." Id.
year old proceeding.\(^{181}\)

C. THE INTERNATIONAL AIR TRANSPORTATION
COMPETITION ACT OF 1979

Congress had joined the fray in 1980 by promulgating the International Air Transportation Competition Act of 1979 [IATCA].\(^{182}\) The legislation establishes a zone of pricing flexibility for international rates, pursuant to which carrier pricing may freely range from 5% above to 50% below the Standard Foreign Fare Level with limited regulatory supervision.\(^{183}\) The principal policies IATCA espouses include *inter alia*, \"[t]he placement of maximum reliance on competitive market forces and on actual and potential competition (A) to provide the needed air transportation system. . . (B) to encourage efficient and well-managed carriers to earn adequate profits and to attract capital . . . to provide efficiency, innovation, and low prices, and to determine the variety, quality, and price of air transportation services.\"\(^{184}\) The international negotiating objectives of the United States are declared by Section 17 of the IATCA to include, *inter alia*, \"freedom of air carriers . . . to offer fares and rates which correspond with consumer demand . . . [and] the maximum degree of multiple and permissive international authority of United States air carriers so that they will be able to respond quickly to shifts in market demand.\"\(^{185}\) These particular policies seem to support the Carter Administration's negotiating endeavors begun two years before under the Benelux model.

But pro-competitive provisions are by no means the exclusive statutory instruments for effectuating U.S. international aviation policy. As several industry analysts have noted, \"the legislation was more cautious and realistic than the Administration's policy.\"\(^{186}\) Indeed, the opening provi-


\(^{184}\) *Id.* § 1034(a)(7).

\(^{185}\) *Id.* § 1502(b)(9).

\(^{186}\) Bilateral air transport agreements may be concluded as treaties, inter-governmental agreements, executive agreements, conventions, protocols and exchanges of diplomatic notes. One commentator has noted that such agreements need not, however, be of a formal character and that international law imposes no requirement that such an agreement be in writing. B. CHENG, *supra* note 28, at 465. An excellent resource tool for the study of U.S. bilaterals is *PROVISIONS IN U.S. INTERNATIONAL TRANSPORT AGREEMENTS* (1985), a 3-volume compilation published by the AIR TRANSPORT ASSOCIATION [hereinafter cited as ATA U.S. PROVISIONS]. Dr. Gertler has succinctly summarized the purposes of bilateral air transport agreements:

The present objective of the agreements seems to be not only an exchange of routes and traffic rights, but also the establishment of a broad spectrum of administrative, legal, economic and operational conditions considered necessary for the operation of air
sions of IATCA emphasize that to the extent that competition is employed
to allow prudently managed and efficient carriers "to earn adequate prof-
its and to attract capital," account must nevertheless be taken of the "ma-
terial differences, if any, which may exist between interstate and overseas
air transportation, on the one hand, and foreign air transportation, on the
other." \textsuperscript{187} This distinction had been lost by the Carter CAB under the
Chairmanships of Alfred Kahn and Marvin Cohen. Moreover, at the insis-
tence of the U.S. House of Representatives, the bill was specifically
amended to incorporate a requirement that the economic health of U.S.
carriers be protected, by requiring ""[t]he strengthening of the competitive
position of United States air carriers to at least assure equality with for-
ign air carriers, including the attainment of opportunities for United
States air carriers to maintain and increase their profitability in foreign air
transportation."" \textsuperscript{188}

Other significant policy imperatives of IATCA insist that the govern-
ment avoid ""unjust discrimination, undue preferences or advantages, or
unfair and deceptive practices, . . ."" \textsuperscript{189} and prevent ""unfair, deceptive,
predatory, or anticompetitive practices in air transportation. . . ."" \textsuperscript{190} Sec-

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services and for the related commercial and other activities of airlines in the territory of
the other party.

Gertler, supra note 43, at 781.

\textsuperscript{187} Most U.S. bilateral air transport agreements define territory as "". . . the land areas under
the sovereignty, suzerainty, protection, jurisdiction or trusteeship of that State, and territorial wa-
ters adjacent thereto."

\textsuperscript{188} The ""and beyond"" refers to bilaterals which provide for an exchange of so-called ""fifth
freedom"" rights. See infra, note 28.

\textsuperscript{189} As economic instruments, airlines are expected to contribute to the expansion of a
country's industrial base, spur the development of remote regions, earn foreign cur-
currency, and, in some countries, help to support an indigenous aircraft industry. As polit-
ical instruments, airlines are perceived by some as conferring prestige upon their
country of registry and are used as tools of foreign policy implementation. Inaugura-
tion of air service between two historically hostile or even remote states may be viewed as a
symbol of detente, desire for expansion of bilateral ties, or some other foreign policy
objective. In pursuit of such symbolism, government agencies concerned with foreign
policy may urge the establishment of specific air routes which have limited commercial
viability.

\textbf{B.} \textit{Gidwitz, supra note 2, at 32. See generally, Nationality of Airlines, supra note 5.}

\textsuperscript{190} As the international route structure has grown and the number of airlines operating
international routes has proliferated, conflict in the international air transport industry
has intensified. Issues of contention—especially the degree of regulation in the industry—stem from the diverse nature of the more than one hundred carriers involved in
international air transport. . . . The evolution of international air transport is less a func-
tion of aviation technology or conventional commercial traffic than an expression of
political forces in specific historical periods. It has been the politics of expansionism,
war preparation, diplomacy, economic doctrine, or other conditions not intrinsically rel-
ted to air transport itself that have defined the development of international air trans-
port more than the nature of available aircraft or the amount of traffic actually carried on
world airlines. The size and scope of a particular airline's network do not always accu-
ately reflect the commercial strength of that airline's individual routes or of its entire
route network.

\end{flushleft}
tion 17 of IATCA, which specifies U.S. negotiating objectives, is more specific in its requirement for “the elimination of discrimination and unfair competitive practices faced by United States airlines in foreign air transportation, including excessive landing and user fees, unreasonable ground handling requirements, undue restrictions on operations, prohibitions against change of gauge, and similar restrictive practices...”191 It was an exaggerated emphasis upon the pro-competitive provisions of IATCA, coupled with an inadequate implementation of its economic health imperatives and anticompetitive prohibitions, that led to vigorous objectives by many U.S.-flag carriers in the early 1980s.

IV. THE IMPACT OF THE “OPEN SKIES” ON THE U.S. AIRLINE INDUSTRY

Numerous representatives of U.S.-flag carriers vehemently objected to the Carter Administration’s policy of trading “hard rights” (access to major United States interior markets) for “soft rights” (theoretical access to foreign markets, imprecise promises for liberal pricing opportunities, and prohibitions against discrimination and unfair competitive practices) in the new rounds of Benelux-type bilateral air transport negotiations.192

B. Gidwitz, supra note 2, at 72-73.

191. Fundamental to the process of bilateral air transport negotiations are the general air-transport policies of the negotiation states. Most countries adhere to certain positions on readiness to exchange various traffic rights, capacity control, pricing, user fees and charges, and other aspects of commercial transport. These positions are usually well known among international civil-aviation authorities and may even be published as formal policy statements. What is frequently less well known and even more rarely admitted is the intrusion in air-transport negotiations of partisan domestic politics or foreign relations issuer irrelevant to the aviation questions at hand. Although the practice of using non-aviation quid pro quos to obtain air traffic rights is fairly widespread, governments seem loath to admit it and rarely acknowledge in public such trade-offs.

Id.

192. C.E. Meyer, Jr., former CEO of Trans World Airlines, criticized the Carter Administration’s approach in these terms:

The prior administration was so enamored with the theory of free competition that they failed to recognize the realities of the marketplace. They attempted to sell the economic theory with a religious commitment and insensitivity to the point where foreign countries and their carriers frequently concluded that their only defense was to retaliate against their U.S. competitors.

The extent of damage caused by the prior administration’s philosophy, strategy, and zealous commitment to what they perceived to be a free market environment has been clearly counterproductive to a number of explicit and implicit objectives of international aviation policy... .

House Hearings on International Aviation, supra note 73, at 195-96. Similarly, the former CEO of Pan American World Airways, Inc., William T. Seawell, echoed these sentiments:

The “open skies” policy was administered by the C.A.B. as if [no] market structure problems or discriminatory practices existed, and virtually no attention was paid to them in bilateral negotiations. The implicit assumption was that the international marketplace did not differ meaningfully from the domestic arena. Thus, the CAB assumed that competition would be enhanced by certificating the maximum number of carriers, irrespective of nationality. It was assumed that in a competitive market U.S. carriers could hold their own—that if they are aggressive and productive, profits would naturally follow.
The Carter Administration's "open skies" policy of giving access to

Thus, U.S. policy has been administered without any consideration of impact on trade balance or the effect on U.S. carrier profitability. The only objectives pursued were the authorization of the maximum number of U.S. and foreign-flag carriers, and low fares at any cost to U.S. carriers. Routes were freely given to the foreign operators in exchange for the "right" of U.S. carriers to serve the country in question, and for vague guarantees that the foreign countries would permit pricing freedom.

In practice, these policies have proven disastrous for the U.S. flag. Because the foreign carriers are given free access to the U.S. market, and superior access to their own, they were able to capitalize on the valuable rights which were ceded by the U.S. But U.S. carriers often found that the new agreements were a one-way street. Foreign government support of their own carriers, and denial of market access to U.S. carriers, made it difficult and often impossible for the U.S. carriers to compete.

*Id.* at 81-82. He continued:

During the past four years, the U.S. carriers have been in the unfortunate position of standing in a virtual adversarial position with respect to their own aviation regulatory authorities. If the U.S. is to hold its own economically in the 1980s, the U.S. government cannot be the foe of U.S. industry. The goal of the U.S. government should be the preservation and strengthening of its own carrier system, rather than its fragmentation and disintegration.

*Id.* at 189. And, Thomas F. Grojean, President of the Flying Tigers Line, Inc., noted:

In the past, the U.S. has recognized competitive disadvantages suffered by its international-flag carriers and sought to maintain competitive advantages to balance the advantages enjoyed by foreign carriers. Since entry is the most significant restriction controlled in the U.S., it was the most common device for offsetting the restrictions faced by U.S. carriers. In recent years, however, this device has been placed on the trading block at wholesale prices.

*Id.* at 319-20. Even Monte Lazarus, Senior Vice President of United Airlines, one of the initial authors of airline deregulation bills ultimately promulgated into law, eloquently observed that "it does take two to tango internationally and you can't willy-nilly just transfer over domestic policy internationally." *Id.* at 473.

Congressman Barry Goldwater, Jr. (R-Ariz.), summarized the complaints of U.S.-flag carriers against their government's international aviation policy, by noting the "[s]evere allegations that our government, which does the negotiating for our flag carriers are not truly aggressive enough, that they are giving away the stores, that they are not looking out after our best interests, but in fact are more interested, seemingly, in improving the lot of our foreign competition." *Id.* at 771. And Ronald L. Danielian, Executive Vice President of the International Economic Policy Association, concluded that "in international aviation, the United States has offered open and unrestricted access to its market far in excess of what our carriers receive in foreign countries." *Id.* at 1035. Former CAB Chairman Secore D. Browne was particularly critical of the Carter Administration's approach: "The proponents and defenders of open skies [have] almost evangelistic faith in the curative powers of a free market over the passage of time for the real world problems of a market that never has been, and never will be, free—international civil air transportation." *Id.* at 1188. The Reagan Administration's State Department seemed to recognize these failures. Assistant Secretary Judith T. Connor noted:

Rarely a week goes by now that the U.S. Government does not have to intercede for our carriers with some of our partners to remind them of their obligation under the bilaterals. Clearly, in those markets characterized by such environment, it may have been naive for the U.S. government to believe that a liberal bilateral agreement would truly present U.S. carriers with full opportunity to compete for a fair share of the market.

In the future we will negotiate with the awareness that the letter of our international agreements can in fact be ignored, and that such violations seriously compromise the benefits we believe we are obtaining. In this way we hope and intend to strike better bargains.

*Id.* at 1223. M. BRENNER, supra note 75, at 113.
the world's most lucrative international aviation markets\textsuperscript{193} to foreign-flag carriers and opening the floodgates of entry to an unlimited number of U.S.-flag carriers caused the passenger market pie to be sliced into thinner and thinner pieces, without appreciably increasing its size.\textsuperscript{194}

Under many of the Bermuda I agreements which were in effect prior to the Benelux rounds, the United States already possessed jurisdiction to authorize multiple U.S.-flag carriers to fly to foreign cities from interior U.S. points.\textsuperscript{195} U.S. policy traditionally had chosen to funnel domestic traffic into international hubs such as New York, Chicago, San Francisco, Los Angeles, or Miami, where the interior flow could be aggregated to fill the capacity of the transcontinental wide-bodies—the L-1011s, B-747s, and DC-10s.\textsuperscript{196} Cabotage legislation has long given local airlines the exclusive opportunity to carry domestic traffic,\textsuperscript{197} allowing U.S.-flag carriers to

\begin{footnotesize}
\begin{itemize}
\item[193.] Of the 250 million individuals in the United States, approximately 50 to 60 million have the economic ability to fly internationally. In contrast, the top four or five European markets have only 26 million people who fall into this category. \textit{House Hearings on International Aviation}, \textit{supra} note 73, at 108 (testimony of Ronald L. Daniellian).
\item[194.] Trends in total traffic volumes suggest little correlation between the extent of competition and traffic growth. The slowest rate of growth was in the European market where competition was most intense. The fastest traffic growth, by far, until the 1982/1983 economic collapse, was in South America, the least competitive market.
\item[195.] \textit{M. BRENNER, supra} note 75, at 113.
\item[196.] For example, the U.S.-Netherlands bilateral air transport agreement authorized U.S.-flag service "from the United States" rather than from specified points. \textit{House Hearings On International Aviation, supra} note 73, at 440 (testimony of Donald C. Comlish).
\item[197.] \textit{Id.} at 105-107 (statement of William T. Seawell).
\end{itemize}
\end{footnotesize}
fill unused capacity into the international hub by attracting local passengers. For example, in 1957 Korean Air Lines was given authority to serve only Alaska and Seattle. Interior flow to the Seattle gateway was, by virtue of cabotage legislation, the exclusive domain of U.S.-flag carriers. Moreover, U.S. passengers who began their trip abroad a U.S. carrier were generally unlikely to switch to a foreign carrier at the international hub for the remainder of the flight.

By giving foreign carriers direct access to lucrative interior markets, these traditional advantages were diluted. For example, KLM, the dominant carrier in the U.S.-Netherlands market, began new service to Miami, Boston, Houston, Atlanta, and Los Angeles. By 1981, KLM

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the Chicago Convention, which also prohibited it from being granted to a foreign airline except on a nondiscriminatory basis:

Each contracting state shall have the right to refuse permission to the aircraft of other contracting States to take on in its territory passengers, mail and cargo carried for remuneration or hire and destined for another point within its territory. Each contracting state undertakes not to enter into any arrangements which specifically grant any such privilege on an exclusive basis to any other State or any airline of any other State, and not to obtain any such exclusive privilege from any other State.


The cabotage reservation first appeared in U.S. legislation with the promulgation of Section 6(e) of the Air Commerce Act of 1926, 67 Stat. 489, and was subsequently incorporated into section 416(b) of the Federal Aviation Act of 1958, 49 U.S.C. § 1386. It was amended by section 21 of the international Air Transportation Competition Act of 1979 to allow foreign air carriers to transport domestic passengers and freight during periods of emergency. 49 U.S.C. § 1386(b)(7).

198. As one commentator has noted, "The richest international air routes in the world are those between the United States and other developed nations." House Hearings on International Aviation, supra note 73, at 1236 (statement of British Airways).

199. The debate as to whether U.S.-flag carriers are jeopardized because interior U.S. markets are opened to nonstop international service is not without controversy. Indeed, a strong argument can be made that it is to the benefit of U.S. carriers that their hubs be opened for international service because of the beyond-market flow they will be able to funnel into the international route, and protection that cabotage legislation (discussed above) affords them to fill up capacity on feeder routes—an opportunity foreign carriers do not enjoy. Thus, U.S. carriers may have a competitive advantage in providing international service from their domestic hubs, such as Atlanta (Delta and Eastern), Chicago (American and United), Dallas (American and Delta), Denver (Continental, Frontier, and United), Houston (Continental), Pittsburgh (U.S. Air), and St. Louis (TWA and Ozark). See generally, A. SAMPSON, supra note 2, at 140-41. Single-plane advantages from beyond points cannot be duplicated by most foreign carriers on this side of the Atlantic, just as fifth-freedom opportunities beyond London, Paris, and Amsterdam are circumscribed by restrictive bilaterals, pooling agreements and analogous foreign-carrier market strength. For a rather strongly worded criticism of the U.S. carrier complaints of the unfairness of the Benelux-type bilaterals on this issue, see Wassenbergh, Aspects of the Exchange of International Air Transportation Rights, 6 ANNALS OF AIR & SPACE L. 235 (1981).

200. The U.S.-flag share of the U.S.-Netherlands market ranged from 9% in 1977, to 12% in 1978, 23% in 1979, and 12% in 1980. Both Braniff and National withdrew from the market. House Hearings on International Aviation, supra note 73, at 735, 975.
was operating 36 wide-body flights to the United States—sufficient capacity to carry all of Holland to America in a single summer.201 The United States was given the right to designate an unlimited number of U.S.-flag carriers to serve Amsterdam, a privilege which already existed under the language of the preexisting *Bermuda l*-type agreement between the two nations. As a result of KLM’s strength in its Amsterdam hub, as well as its ability to marshall sixth-freedom, beyond-segment traffic into it, (because of pooling arrangements,202 market identity, and local traffic fill-up), U.S.

201. *Id.* at 209 (testimony of C.E. Meyer, Jr.).

202. “Under a typical pooling agreement, the carriers serving a given route agreed that they will ‘pool’ the revenues earned by each carrier into a common ‘pot’ which is then divided between the carriers according to an agreed formula. The carriers usually mesh their schedules, pricing, reservations and sales promotion.” *Id.* at 79-80 (statement of William T. Seawell). *See generally* A. SAMPSON, *supra* note 2, at 92-93. Between 75-80% of the tonne-kilometers moved in intra-European air transportation is controlled through pooling arrangements. Professor Haanappel has defined these agreements as follows:

In its simplest form a pooling agreement can be described as an agreement for the sharing of revenues derived from the joint operation of an air route or air routes by two or (exceptionally) more airlines. At the head of every pooling agreement there is a capacity (and often frequency and scheduling) agreement between airlines. On the basis of that capacity agreement, it is then further agreed between the participating airlines that they will put revenues derived from the joint operation of an air route or air routes into one and the same fund, to be divided between the carriers in accordance with a predetermined formula.

P. HAANAPPEL, *supra* note 105, at 57-58. Such agreements would likely violate the U.S. antitrust laws if they occurred within the United States. The “five freedoms” may be defined as follows:

1) A civil aircraft of one country has the right to fly over the territory of another country without landing, provided the overflown country is notified in advance and approval is given.

2) A civil aircraft of one country has the right to land in another country for technical reasons, such as refueling or maintenance, without offering any commercial service to or from that point.

3) An airline has the right to carry traffic from its country of registry to another country.

4) An airline has the right to carry from another country to its own country of registry.

5) An airline has the right to carry traffic between two countries outside its own country of registry as long as the flight originates or terminates in its own country of registry.

B. GIDWITZ, *supra* note 2, at 49-50. In the years since the Chicago Conference, three other “freedoms” have been identified:

6) An airline has the right to carry traffic between two foreign countries via its own country of registry. Sixth freedom can also be viewed as a combination of third and fourth freedoms secured by the country of registry from two different countries producing the same effect as the fifth freedom vis-a-vis both foreign countries.

7) An airline operating entirely outside one territory of its country of registry, has the right to fly into the territory of another country and there discharge, or take on, traffic coming from, or destined for, a third country or third countries.

8) An airline has the right to carry traffic from one point in the territory of a country to another point in the same country. More commonly known as “cabotage,” this practice is forbidden by many bilateral agreements concluding those concluded by the United States.

B. CHENG, *supra* note 28, at 13-17. Professor Cheng has noted that “the more refined these distinctions become the more restrictive is the policy pursued; for every newborn ‘freedom of the air’ is in reality an additional shackle on the right to fly of foreign carriers, to be removed only at a price.” *Id.* at 17.
carriers were unable to make significant inroads into the U.S.-Netherlands market, one which had traditionally been dominated by the Dutch. Indeed, multiple designations of U.S.-flag carriers had the tendency merely to dilute each carrier's segment of the market, although the overall pie may have grown somewhat larger as a result of increased pricing competition.203

Similarly, in the Belgium/Luxembourg-United States market, U.S.-flag carriers earned only $28 million in passenger fares, while American passengers spent $73 million on foreign-flag carriers.204 During the same period, German carriers were given the opportunity to serve 12 U.S. cities, and the United Kingdom was given access to 20.205 Several industry analysts have concluded that "the U.S. airline share of [the international] market is reduced by significantly increased foreign airline access to the U.S. market."206

203. There are several markets in which U.S. carriers enjoy less than 50% of the traffic despite multiple designations of U.S.-flag carriers, and the existence of liberal bilaterals, including Belgium, Costa Rica, West Germany, Korea, and the Netherlands. House Hearings on International Aviation, supra note 73, at 856. In 1980, Professor Haanappel pointed out that "The Dutch carrier KLM has close to ninety percent of the total U.S.-Netherlands market and that the remaining ten percent is shared between several U.S. carriers." Haanappel, supra note 36, at 262. As one government official has noted:

When we introduce new U.S. carriers in the market, we must at least realize the possibility that they may end up competing among themselves and with the incumbent U.S. carrier for a share of the market. Unquestionably, the overall size of the traffic "pie" increases through new entry and lower promotional fares. However, the [Reagan] Department of Transportation is concerned that the pie may not increase enough to give any one U.S. carrier a large enough slice to produce profitable operations. House Hearings on International Aviation, supra note 73, at 751 (testimony of Judith Connor). Between 1977 and 1980, seven U.S.-flag carriers received new or expanded authority in the transatlantic market. Id. at 973 (statement of Rep. Norman Y. Mineta (D-Calif.)).

204. Id. at 1023. To obtain a balanced picture, one should examine Alfred Kahn's defense of this negotiating strategy. See id. at 943-44, and Kahn, supra note 72.

The existing powers of the CAB/DOT to impose and invoke license and fare suspension and service restrictions have had a sound prophylactic effect on the occasional intransigence of foreign governments to comply with their obligations under bilateral air transport agreements. Moreover, the mere presence of such unilateral remedies makes compliance with the international responsibilities arising there under a prudent course of action. The existence of effective sanctions under bilateral agreements or multi-lateral conventions assures that the principles of international law established thereby will prevail as national obligations, and that adherence to the provisions thereof will be assured.

205. Id. at 424 (testimony of Donald C. Comish). See id., at 108, 110.

As of the summer of 1986, British Airways was served London from the following U.S. points: Anchorage, Baltimore, Boston, Chicago, Detroit, Los Angeles, Miami, New York, Orlando, Philadelphia, Pittsburgh, San Francisco, Seattle, Tampa, and Washington, D.C.


[11] It can be tentatively concluded that the advance of procompetitive policies in international air transportation has neither served as a market stimulus nor benefitted the U.S.-flag airline system in terms of market share. Indeed, the Far East experience indicates that increased foreign airline access is inimical to U.S. airline market participation.

Id.
Moreover, there are significant structural differences between U.S. and foreign-flag carriers which may place the former at a competitive disadvantage. United States carriers are privately owned; those which continuously fail to make satisfactory profits will eventually find themselves in bankruptcy—a victim of the Darwinian economic process of weeding out the weak and inefficient. In contrast, most foreign airlines are owned or heavily subsidized by their governments; the profit imperative is a less critical factor for their survival. Many foreign-flag carriers are operated...

207. Indeed, one source estimates that 75% of foreign air carriers are owned, in whole or part, by their governments. Subcomm. on Aviation, Senate Comm. on Commerce, Science and Transportation, Hearings on S.1300, International Air Transportation Competition Act of 1979, 96th Cong., 1st Sess. 166 (1979) (testimony of C.E. Meyer, Jr.) [hereinafter cited as Senate Hearings on IATCA]. The principal airlines of western Europe had the following levels of government ownership in 1979:

<table>
<thead>
<tr>
<th>Airline</th>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air France</td>
<td>98.80%</td>
</tr>
<tr>
<td>Air Inter</td>
<td>49.90%</td>
</tr>
<tr>
<td>Alitalia</td>
<td>99.00%</td>
</tr>
<tr>
<td>British Airways</td>
<td>100.00%</td>
</tr>
<tr>
<td>KLM</td>
<td>78.00%</td>
</tr>
<tr>
<td>Aer Lingus</td>
<td>100.00%</td>
</tr>
<tr>
<td>Lufthansa</td>
<td>82.16%</td>
</tr>
<tr>
<td>Luxair</td>
<td>25.57%</td>
</tr>
<tr>
<td>Sabena</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Comment, Introducing Competition to the European Economic Community Airline Industry, 13 Calif. W. Int'l L.J. 364, 365 n.7 (1985). The only major European airlines that are wholly privately owned are the U.K.'s British Caledonian, and France's UTA. See note 214, infra.

208. As William T. Seawell, former CEO of Pan American World Airways, Inc., has noted:

Most governments—unlike the U.S. government—own a substantial share of their national flag carriers and provide them with direct or indirect subsidies and other financial assistance. Such assistance can take many forms, including direct capital grants, loans at below-market interest rates, and government loans which are subsequently "forgiven".

House Hearings on International Aviation, supra note 73, at 124-25 (citations omitted). He also pointed to the significant differences between the U.S. and foreign-flag economic environment:

The market structure in most foreign countries bears little resemblance to the U.S. market; instead, these markets are characterized by a pervasive pattern of state involvement in the economy—an involvement directed toward promoting the success of national enterprise, including the national airline, against foreign rivals. In contrast to privately owned U.S. airlines, foreign air carriers are generally established and preserved by their foreign governments for reasons such as national prestige, development of tourism, employment, and national defense capability. They do not need to make money to survive. While profitability is an ostensible goal, it is only one of a number of objectives, and the lack of profits will almost never be permitted to result in the failure of the airline, or even a contraction of operations. Government ownership, in and of itself, creates significant incentives to ensure that the flag carrier will not only survive, but will also maintain and even expand its operations regardless of financial results.

In this environment, competition alone does not ensure that the most efficient producers prosper. An inefficient, government-subsidized carrier can drive an efficient, privately owned American carrier out of a market—and under Open Skies this has in fact occurred.
for purposes of enhancing prestige,\textsuperscript{209} national security,\textsuperscript{210} tourism, or earning foreign exchange,\textsuperscript{211} rather than for reasons which inspire capitalist efficiency.\textsuperscript{212} \\

\textit{Id.} at 1222-23 [emphasis in original and citation omitted]. See \textit{id.} at 756 (testimony of Judith Connor), who noted that foreign airlines borrow money at lower increase rates because their governments stand behind the debt incurred.

\textsuperscript{209} International aviation offers a rather unique opportunity to "show the flag" around the world, for many of the same reasons which inspired President Theodore Roosevelt to send the U.S. navel fleet around the world. Air transportation also facilitates propaganda distribution and cultural penetrations between nations. See Jonsson, \textit{supra} note 35. See also, A. Sampson, \textit{supra} note 2, at 26, 115-116. Anthony Sampson has noted the heavy dependence of national airlines upon their governments for routes and economic assistance. In return, the governments derive some benefit in terms of national prestige. "The plans painted in their national colors and the glossy showrooms and advertising in the foreign capitals were becoming more visible representatives than embassies or sports teams," observed Sampson. "And the airlines were all appealing to their countrymen—in the words of British Airways' crude slogan—to 'fly the flag.'" \textit{Id.} at 91.

\textsuperscript{210} The importance of aviation to national defense became manifest during the two World Wars. Civil aviation aircraft can undoubtedly be of importance in transporting troops, armaments, and munitions to the fields of battle. \textit{House Hearings on International Aviation, supra} note 73, at 122-23. This has also been recognized by the United States government, which established the Civil Reserve Air Fleet [CRAF] program after World War II. CRAF calls for the rapid mobilization of designated civil aircraft for military use during times of national emergency. Many U.S.-flag carriers have designated passenger and cargo aircraft to the CRAF program. \textit{Id.} at 1014-19 (statement of Ronald L. Danielian).

\textsuperscript{211} Most nations have economic priorities which include the need to earn foreign exchange and improve balance of payments. Industries such as transportation are important to achievement of these economic objectives in ways which are both direct, defined in terms of wealth earned from ticket sales, and indirect, principally defined in terms of tourist revenues. Moreover, airlines create employment opportunities within their countries. As was noted by Thomas F. Grojean, President of the Flying Tigers Line, Inc., "a country may have a political interest in encouraging industrial development or internal employment, and it may deem a low import or export air rate to be more important to the national interest than the airline's short-term profitability." \textit{House Hearings on International Aviation, supra} note 73, at 313. And, Under Secretary of State, Judith Connor, noted that the domestic employment imperative of foreign carriers gave them a competitive advantage: "The numbers of people that foreign carriers hire as a result of their government's social policy also permits the carriers in many cases to provide superior services over a continued period of time, even during economic downturns, because they are able to continue with substantial numbers of in-flight personnel and ground personnel, while our carriers cut back during those periods of economic difficulty." \textit{Id.} at 768. See also, \textit{id.} at 861-62 (statement of Powell A. Moore).

\textsuperscript{212} These rationales were the same which had prompted initial governmental intervention in civil aviation. As one commentator has noted:

In brief, the reasons for the original government interest and intervention in civil aviation can be grouped under four rubrics. \textit{National defense}. World War I demonstrated beyond doubt the military value of aviation. . . . \textit{Economic considerations}. Means of communication and transportation have always been considered as "public services", offering economic advantages to a state even if they may not be particularly profitable. . . . In the case of international aviation, foreign exchange earnings and balance-of-payments considerations provided additional economic incentives for government engagement. \textit{Safety}. Governments everywhere regarded the safety of air transport operations to be their special concern and responsibility. . . . \textit{Foreign policy considerations}. Since international aviation provides ample opportunities to "show the
International aviation, where many of the foreign actors owe their continued existence to their federal treasuries, and where strict territorial sovereignty over a state’s airspace has been universally recognized since the Paris Convention of 1919, has always flown in the shadows of a strong governmental presence.213 Hence, there is a significant question as to whether the free market economic model is appropriate in a politically charged environment in which many of the foreign competitors do not need to make a profit in order to survive, and in which many markets have never been truly “Free”.214 One commentator succinctly summa-
flag” around the world, it has from the outset been viewed as enhancing the prestige of States.

Jonsson, supra note 35, at 278-79. The airlines, though they seem to defy geography, are among the most national of industries, inextricably bound up with their home country’s ambitions and security. A. Sampson, supra note 2, at 19. See Capacity-Reduction Agreements, CAB Order 75-10-77, at 2 (1975): “In international markets, the desire of several nations to maximize . . . tourism spending . . . has fostered a willingness and ability among foreign nations to allow their subsidized flag carriers to sustain the huge operating losses occasioned by the operation of excess capacity . . . .”

213. One commentator has pointed out that a full spectrum of policies in international air transport may motivate a state vis-à-vis the airline industry. As to European nations alone he has categorized their policies as:

a. States want to guarantee the existence of what they call the national airline.

b. States want to ensure that the network of services offered to the public generally has a reasonable constancy and durability.

c. States want their airlines to be profitable.

d. States want to serve other national interests outside air transport, such as tourism, the balance of payments, defence [sic], which may be dependent on the existence of air routes into their country.

e. States want to offer the public low fares. And perhaps one should add:

f. States want everyone to be happy, especially their parliamentaries.


214. P. Dempsey & W. Thoms, supra note 1, at 199. Although most foreign carriers are largely owned or heavily subsidized by their governments, one must recognize that there is an emerging trend toward “privatization” of state-owned airlines, as governments are beginning to sell their ownership interests to private investors. Perhaps the most notable of the recent announcements regarding this movement is the decision of the Thatcher government to sell the United Kingdom’s ownership interest in British Airways. Lufthansa, Sabena, KLM, Air Singapore, Air Malaysia, and Japan Air Lines also appear to be joining the march toward privatization.

Moreover, as to airlines which remain largely state-owned, although the profit imperative is a less significant factor for their survival vis-à-vis privately owned carriers, nevertheless management has several rather good reasons to make profits. First, they measure their success or failure with the performance standard of the private carriers. Hence, they have a psychological incentive to do as well as their private rivals. Second, to the extent they can reduce their dependence on government subsidies they increase management freedom. Subsidies always come with strings attached as to when, where, and how the money shall be spent, and management decisionmaking can become ensnared in the red tape of the entrenched government bureaucrat. These burdens may themselves contribute to less efficient operations. In contrast, healthy profits can be invested in new equipment or expanded markets largely at the discretion of management.

Third, state ownership may itself cause less economical or efficient operations, by govern-
rized the reasons for foreign anticompetitive behavior:

The air above a nation is as sovereign as its soul, penetrated only by express permission. Add to that the prestige which many nations attach to their national airlines, and you have a recipe for permanent protectionism. A third-world nation will limit competition from efficient airlines, because it wants to keep its own national airline aloft. A nation like Switzerland also turns protectionist, not because Swissair is inefficient, but because Swiss labor costs are too high for Switzerland to be an economic country to run an airline from.215

Nevertheless, the Carter Administration pursued the exportation of its policy of deregulation into foreign markets intoxicated by its limited success with the approach in the U.S. domestic market.216 Several commentators have criticized the naive assumptions upon which the internationalizing of that policy was based.217 As Anthony Sampson has aptly noted:

After the United States deregulated the airlines in 1978 the economists could test out their theories and arguments between controls and free entry, between open skies and protection, in the great laboratory of the sky, and the arguments extended round the world. Yet, however bright and clear the economists looked inside their own airspace, they became overclouded as

ment policies which seek to encourage other public interest imperatives such as reduced unemployment (which would require an airline to hire more employees than it really needs), increased tourism (which may require an airline to serve markets from which it derives insufficient passenger revenues because rates are depressed to artificially low levels), or spurping the economic health of domestic manufacturers (which may cause it to purchase domestic aircraft of other operational equipment at a higher price and/or lower quality than can be obtained abroad). Hence, a lethargic and anemic state-owned carrier may not be as innovative as its private competitor, and may not be the market threat that some maintain.

Nevertheless, state-owned carriers will continue to take some share of the air transport pie, and no matter how inefficient, their governments are not likely to allow them to go bankrupt. Therefore, to suggest that privately owned carriers have the same opportunities or burdens as publicly owned carriers is to fail to recognize the differences between apples and oranges. The international air transport environment is not haunted by the ghost of Adam Smith and his invisible hands as is the domestic U.S. economic environment.


216. For an 18 month period in the late 1970s, the airline industry enjoyed the highest profits in its history. The Rise and Fall of the Civil Aeronautics Board, supra note 52, at 119. See Hardaway, supra note 76, at 137-41.

217. The last Chairman of Civil Aeronautics Board, C. Dan McKinnon, a Reagan appointee, criticized the Carter Administration for giving away access to interior U.S. points on the incorrect assumption that a competitive marketplace could be created abroad. "[The Carter Administration] policy ignored some of the cold, hard facts of economic life," said McKinnon. "Foreign countries don’t want competition that would force their less efficient carriers [out of business] or cut into the revenues." He also announced that under the Reagan administration, access to lucrative interior U.S. points would not be given away for free. "U.S. aviation policy has stiffened with demands of a balanced quid pro quo in all future agreements." CAB Chief Blames Unfair Bilateral Pacts on Carter Administration Policies, TRAFFIC WORLD, May 21, 1984, at 60.
they crossed the frontiers into the international arena. For they came up against the obstacles of sovereignty and national price, and no nation would allow its airline to go bankrupt.218

International aviation markets are not subject to the same sort of anti-trust prohibitions against unfair methods of competition that police competitive behavior in domestic U.S. markets.219 Since the inauguration of the U.S. “open skies” policy, a number of United States carriers have complained about discriminatory and anticompetitive practices by foreign governments and their airlines.220 Many foreign carriers are vertically integrated; they frequently are affiliated with corporations which own the airport or reservations systems in their respective nations. And most foreign governments have a strong incentive to protect their local airline and its domestic market. The foreign transport minister frequently wears two hats: he is not only an officer of the government, but he also plays a paternalistic role, attempting to enhance the competitive posture of the local-flag carrier and thereby reduce the cost of subsidy to the national treasury.221 Among the examples of discriminatory practices are higher costs for landing fees and fuel than are charged the local-flag carrier; less desirable gate and ticket agent locations; requirements that local passenger and baggage handling personnel be employed; bias in the computer reservations system; and currency conversion and remittance problems.222 As a consequence, U.S. carriers have generally been less successful than their foreign counterparts in attracting foreign travelers.223

218. A. SAMPSON, supra note 2, at 19.
220. Pan Am, Tiger Slam Past U.S. Bilateral Pacts as “Giveaways”, TRAFFIC WORLD, Mar. 26, 1985, at 44. These difficulties will be discussed in greater detail in Chapter X.
221.

This attitude reflects more than simple chauvinism. Many foreign governments have financial interests in their airlines. But there are other factors as well. International air transportation is generally recognized abroad as an important foreign trade item, and a means for earning hard currencies; it is widely regarded as an aid in attracting tourism; it can provide significant employment; in an emergency, the civil aircraft and infrastructure (personnel and facilities) become part of the national defense forces; it is often used for diplomatic communication and presence abroad; and many governments consider their national airlines instruments and symbols of prestige. The Carter Administration policy makers subordinated all of these consideration to “consumer” benefits.

M. BRENNER, supra note 75, at 109, n.84.
223. Between 1972 and 1983, U.S.-flag carriers were able to attract 55-60% of U.S. citizens, but only 40% of aliens who travel to or from the United States.

[Altho}
There are many explanations for this. In many foreign countries, there are motivations of patriotism and security (language, type of food, etc.) to use the national airline. Beyond that, however, there are other influences: government regulations requiring government employees and many business travelers to use the national airline; national airline control over the distribution system; bias in computer reservations systems owned by national airlines; currency exchange controls; among others. Government ownership of airlines provides a strong incentive for government to help airlines to be successful. Without being judgmental of the merits of the "open skies" policy, it is certainly a fair criticism of its advocates that they either ignored or downplayed the pervasive absence of a "fair marketplace" abroad.224

The objective of the Civil Aeronautics Board was to provide the consumer—the international traveler—with improved service at reduced fares. The theory was essentially that increased competition among air carriers would lead to a proliferation of services available to the traveling public at competitive costs reasonably related thereto, and that the price elasticity of the passenger market will ensure increased capacity for the carriers and, consequently, improved revenues.225

Nevertheless, the Carter Administration's policy of giving foreign-flag carriers access to interior U.S. points and certificating additional U.S.-flag carriers to compete in international markets,226 coupled with a decade-long decline in U.S. passenger share of the international market,227

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60 percent of the total traffic to and from these areas; and U.S. airlines have consistently captured more than 60 percent of the U.S. citizens and more than 50 percent of the aliens. If these nearby regions are eliminated, U.S. airlines are carrying less than half the long-haul international air traffic to and from the United States.

M. BRENNER, supra note 75, at 109 [citations omitted].

224. Id.

225. Dempsey, supra note 53, at 441.

226. The crisis facing the American airlines came not just from the recession and the surplus of jumbos, but from a fundamental change in the political weather. The politicians began demanding that Washington withdraw its protection and regulation, and the airlines became the most spectacular test in the crusade to deregulate America, which soon affected airlines around the world.

A. SAMPSON, supra note 2, at 133. Another commentator has affirmed this conclusion:

Regrettably, the airlines were the first to suffer the pains of liberalisation. They have sustained serious operational and commercial losses; losses which are likely to continue for a considerable time even if rationality is injected into the system of international civil aviation without any delay.

* * *

While it is fully appreciated that a substantial responsibility lies with the present recessionary trends in the world economy, it can also not be denied that the U.S. deregulation policy was fully involved in aggravating the bad results of the airline industry. If the results were solely caused by the downturn in the economy and decline in traffic demand then results of all airlines should have been consistent; on the contrary, the airlines were placed disadvantageously in the deregulated environment (i.e., the major and privately-owned airlines) incurred considerably more deficits than the other airlines.

Impact of Current U.S. Policy, supra note 98, at 301, 304 [citations omitted].

227. The percentage of U.S. citizens of the international aviation market declined from 63.2% in 1972 to 46.2% in 1981, rising to 49.5% in 1982. In the U.S.-Europe market, the figure fell
sharply increased fuel prices,\textsuperscript{228} the recession of the late 1970s and early 1980s,\textsuperscript{229} and a surge in anticompetitive and discriminatory nontariff barriers, contributed to a deterioration in market share and to a serious economic decline for several U.S.-flag carriers.\textsuperscript{230} Between 1975 and 1984, North American carriers’ share of the world total fell from 22.1% to from 66.8% in 1972 to 46.9% in 1981, rising to 51.9% in 1982. \textit{CAB, Report to Congress 95} (1977); \textit{CAB, Report to Congress 83} (1982). \textit{CAB Chairman Marvin Cohen refused to attribute any significant position of air carrier economic losses to the “open skies” policy, arguing that there were no material differences between the domestic and international aviation market and that essentially the same pro-competitive deregulatory approach was appropriate for both. See \textit{House Hearings on International Aviation, supra} note 73, at 568-69. For a strong criticism of Chairman Cohen’s reasoning, see \textit{id. at 474}, 998 (statements of Rep. Elliott Levitas). Congress-\nnman Levitas noted:

\begin{quote}
For the life of me, I cannot understand how you can take the position that where a competitor has his losses subsidized, that you have a competitive situation. . . . No foreign government wants to put its tax resources into financing an airline. But you can make management decisions that you know are uneconomical if you don’t bear the price of not turning a profit on those decisions, or, alternatively, you don’t have to worry about taking a loss.
\end{quote}

Free enterprise requires not only flexibility in pricing, but it requires the opportunity to make a profit and the risk of failure.

\textit{id. at 801.}

\textsuperscript{228} See \textit{A. Sampson, supra} note 2, at 126-27.

\textsuperscript{229} “The world recession, made crueler by the extension of deregulation, brought the long \nair boom to an abrupt halt; and while 1984 brought an upturn in American passengers, the combination of deregulation, the high dollar and the Asian competition still threatened the American airlines.” \textit{A. Sampson, supra} note 2, at 227.

\textsuperscript{230} Ronald L. Danielian of the International Economic Policy Association noted the causes of deterioration of U.S. market share as follows:

As airlines were beginning to control their losses from the heavy fuel payments, 1979 brought another price increase so that one fuel can represent over one-third of operating costs. Add to this the reduction in U.S. market shares and increased nontariff barriers, and U.S. carrier survival is threatened. From a competitive standpoint, our carriers are at a disadvantage, because their losses dictate that they must pare down their route structure in search of healthier balance sheets. On the other hand, the foreign airlines with large losses, are not pressured into cutting back routes to the same degree. Foreign carriers for the most part are owned, controlled, or supported financially by their governments, and their operating losses are offset by various government actions. U.S. carriers, on the other hand, must bear the losses from reduced schedules while giving up revenue paying passengers to foreign airlines as their penetration into our much larger market gives them major opportunities.

\textit{House Hearings on International Aviation, supra} note 73, at 1026-27 (citation omitted). Melvin Brenner and his colleagues had these observations:

The airline seat is a perishable commodity. It is inherent in a highly competitive environment that there will continue to be strong pressures against adequate pricing. These pressures are intensified by ease of entry. While this offers great bargains to today’s travelers, it raised very troublesome questions for the U.S. airlines, and their continuing ability to compete effectively against foreign government-supported airlines.

\textit{M. Brenner, supra} note 75, at 121.

The economic losses of the early 1980s were not restricted to U.S. carriers. Anthony Sampson noted that the world’s airline industry is “technically close to being bankrupt.” \textit{A. Sampson, supra} note 2, at 16. He quoted Umberto Nordio of Alitalia who provided the rationale:

We’re selling a product which is not stockable. It’s as if a car dealers were told that all
20%.\textsuperscript{231} Between 1977 and 1981, the U.S. share of the international aviation market dropped from 45.4% to 41.3% in the transatlantic sphere, and from 45.0% to 41.8% in the transpacific.\textsuperscript{232} For every percentage point U.S.-flag carriers lose in the U.S.-Europe market, they forfeit revenues of $47 million;\textsuperscript{233} for every percentage-point decrease in the U.S.-Asia market, U.S. airlines lose $25 million.\textsuperscript{234}

The aviation industry is an important contributor to the United States' balance of payments. In 1980, all U.S. service industries, including transportation and tourism, contributed a net $35 billion to the U.S. balance of payments. Of that, U.S.-flag carriers earned $2.6 billion carrying 49.1% of total international passenger traffic, or 18.9 million of the 39.5 million passengers who flew to the United States that year; foreign tourists spent his cars would be worth nothing tomorrow morning. Naturally he would rush to sell them, even at a dollar each.

\textit{Id.} at 18. "Worldwide industry losses for 1982 were $900 million, despite the fact that the industry carried 7 million more passengers than it did the preceding year." \textit{Transportation Deregulation, supra} note 71, at 342 [citations omitted]. However, not all commentators paint the impact of deregulation so grimly. In a rather succinct summary of international air deregulation, two commentators note:

The airline experience . . . casts doubt on the . . . argument . . . that other countries might successfully engage in unfair competition against U.S. firms. Although the evidence is too limited to permit a firm conclusion, research suggests that U.S. airlines generally have benefited from open skies policy through increased market shares and improved profitability.

\* \* \* 

Liberal agreements also appear to have helped, or at least not hurt, the profitability of U.S. airlines.


\textsuperscript{231} \textit{Passenger, Freight Traffic Uptown Passes 1980 Record}, \textit{AV. WEEK & SPACE TECH.}, May 6, 1985, at 30. During the same period, the European carrier share fell from 43.6% to 36.9%; the Asian and Pacific carrier share grew from 18.7% in 1975 to 26.5% in 1984; Middle East airlines rose from 4.6% to 6.5%; and Latin American and Caribbean air carriers dropped from 6.6% to 5.6%. \textit{Id.}

\textsuperscript{232} \textit{House Hearings on International Aviation}, \textit{supra} note 73, at 73. Between 1973 and 1981, and U.S.-flag share of the U.S. international aviation market fell from 54.2% to 48.6%. The following year, it increased by one percentage point. In the U.S.-Europe market, it fell from 49.2% in 1973 to 41% in 1981, increasing to 44.9% in 1982. \textit{See CAB REPORT TO CONGRESS 95} (1977), and \textit{CAB REPORT TO CONGRESS 83} (1983).

\textsuperscript{233} Competition was constantly heating up, from airlines which were owned by their governments and which could therefore often afford to lose money on prestigious routes. The North Atlantic was the most competitive of all, as foreign airlines cut into the American share—first the Europeans and then the others beginning with El Al, Air India and Pakistan International. In 1947 TWA and Pan Am had carried over eighty percent of transatlantic travellers; by 1962 they were carrying only thirty-two percent, with nineteen airlines competing between the United States and Europe. IATA did what it could to maintain fares, but it could not prevent the pressure from new intruders and from the growing charter flights.

A. \textit{Sampson, supra} note 2, at 109-110.

\textsuperscript{234} \textit{House Hearings on International Aviation, supra} note 73, at 114.

\textit{Id.} at 73. \textit{See id.} at 184, 1225, 1305.
an additional $10.1 billion in the United States.\textsuperscript{235} Nevertheless, the balance of payments generated by international aviation is becoming a matter of increased concern in the United States. The "passenger fare deficit",\textsuperscript{236} ranging between $1 billion and $1.7 billion during the 1970s, shot up to $3 billion in 1983; the "travel spending gap"\textsuperscript{237} rose to $2.6 billion that year.\textsuperscript{238}

The turmoil experienced by U.S.-flag carriers in the years immediately following adoption of the "open skies" policy has been profound.\textsuperscript{239} The nation's major Latin American carrier, Braniff, flew into bankruptcy,\textsuperscript{240} selling off its South American routes to Eastern,\textsuperscript{241} which has

\begin{quote}
\textsuperscript{235} Id. at 1005. If foreign-flag carriers were to capture the U.S. portion of the international passenger market, "because of insufficient revenues owing to competitive reasons and possible saturation of the market", the U.S. would lose $3.69 billion, "a heavy burden for our balance of payments to absorb." Id. at 1010 (statement of Ronald L. Danelian).

\textsuperscript{236} The passenger fare account is the difference between the U.S. citizen share of the international aviation market vis-à-vis the U.S. carrier market share, weighted by average fare payments. The United States experiences a "fare deficit" when the U.S. citizen share of travel exceeds its flag carriers' share of travel. M. BRENNER, supra note 75, a 114.

\textsuperscript{237} The "travel spending gap" is the difference between what foreign travelers spend in the U.S. vis-à-vis what U.S. citizens spend abroad. In the early 1970s, the gap exceeded $2 billion a year. There was a surplus of $1.5 billion in favor of the United States in 1982, dropping sharply to a $2.6 billion deficit in the following year. Id.

\textsuperscript{238} Id. See generally, Schott, Consequences of U.S. International Aviation Policies, 24 Transp. Q. 182, 184 (1985).

\textsuperscript{239} "The deregulation measure taken unilaterally by the United States, in view of the . . . evidence, have seemed to have caused substantially more damage to the international civil aviation than any reform brought about them." Impact of Current U.S. Policy, supra note 96, at 321.

The damage was caused by the very nature of the airline product—its perishability. Unlike manufactured good, airline journeys have to be consumed at the moment of production, they cannot be stocked for resale tomorrow if there is no purchaser today.

It was the expanding of . . . domestic de-regulation package into the international arena that led to a worsening of the problems we were already facing.


The recent financial crisis among United States airlines, as well as radical changes in policy by the United States government, now places the future of international air transportation in question. Many U.S. airlines which were once powerful forces for international commerce have been forced to restrict their operations and withdraw from the markets previously served successfully. . . . A once efficient and highly organized system of transporting passengers, mail, and cargo has been engulfed in confusion.


\textsuperscript{240} "The biggest victim of deregulation was Braniff. . . ." A. SAMPSON, supra note 2, 138-140.

Fearing competition from its major competitors, Braniff chose to expand quickly, opening up dozens of new routes within the United States, Europe, and Asia, and slashing fares by an average of 40 percent. During the same period, other airlines were also moving fast to beat out the competition. Close at Braniff's heels was American Airlines, which had moved its headquarters from New York to Dallas, Braniff's home base; American soon matched Braniff's fare cuts on domestic routes.

The rate war between American and Braniff was described by the Wall Street Journal as a "bleeding contest," destructive to both airlines, and disastrous for Braniff,
itself suffered chronic economic pains and was ultimately consumed by Texas Air. An anemic Trans World Airlines, the dominant U.S. transatlantic carrier, was sieged in a takeover battle between Texas Air maverick Frank Lorenzo and corporate raider Carl Ichan, with the latter ultimately victorious.\textsuperscript{242} By 1985, TWA was suffering the worst economic losses in its history.\textsuperscript{243} And a hemorrhaging Pan Am, the premiere U.S.-flag international carrier, cannibalized virtually all of its non-airline assets to stay aloft until 1985, when it announced the sale of all its Pacific aircraft and

which filed for bankruptcy in May 1982. Braniff followed only by a few months the demise of Laker Airways, a British company also known for its fare cuts and rate wars.

S. TOLCHIN & M. TOLCHIN, supra note 72, at 243.

For Braniff, freedom to enter new international markets contribute to bankruptcy. In two years of transpacific service it lost (before interest) $26.7 million on $43.9 million of revenues. In the Atlantic, from 1978 to 1982, Braniff lost (before interest) $61.8 million on revenues of $312 million.

At the opposite end of the spectrum, so far as the quality of management, efficiency of operation, and financial strength are concerned, is Northwest Airlines. Yet Northwest, which has almost always reported good profits in the Pacific, lost money in the first four years of its U.S.-Europe operations, for an operating loss from 1979 to 1982 of $80.9 million. Even in the spectacular peak profit year of 1983, Northwest earned only $4 million on revenues of $157 million. This would suggest that "freedom to enter" international markets has proved to be very costly for both conservative and speculative-oriented airline managements.

M. BRENNER, supra note 75, at 117. In fairness, Braniff’s bankruptcy was more attributable to its intemperate expansion than to "open skies." Its primary international market was Latin America, which has largely rejected "open skies." Braniff did expand its route structure wildly to the Benelux, Korean and Hong Kong markets with the opportunities for additional entry available under the new liberal bilateralts, but it was doing a great deal more of that domestically. Certainly, these opportunities would have been largely foreclosed had deregulation not occurred. But few other carriers have made such imprudent managerial decisions in the deregulation era as did Braniff.


242. A Daring New Flying Machine, TIME, June 24, 1985, at 36; TWA Gloomily Weighs Its Options, BUS. WEEK, April 2, 1984, at 37. Here again, the empirical evidence does not support a hypothesis that TWA’s problems are directly attributable to "open skies." TWA’s transatlantic operations concentrate on southern European markets, most of whose nations have refused to conclude liberal bilateralts with the United States. Indeed, prior to 1986, TWA’s transatlantic operations were profitable, but its domestic losses (based on hub-and-spoke operations radiating from St. Louis) frequently consumed these international profits.

243. TWA lost $208.4 million in 1985, making the year the carrier’s worst ever. Since 1980, it suffered net losses of almost $250 million, showing a net profit of nearly $30 million only in 1984. Part of its economic problem is attributed to the age of its fleet; although its labor costs are close to the industry average, its older aircraft are less fuel efficient than those of its competitors. How to Lose by Winning, NEWSWEEK, Jan. 20, 1986, at 44-46. Fueled by a flight attendants’ strike and the Athens terrorist bombing of TWA jet, its losses soared to $169.6 million in the first quarter of 1986, despite a radical drop in fuel prices. Carroll, TWA Silent On Number of Fliers, Denies Continuing Strike Hurts, USA TODAY (May 19, 1986), at 5B. Pan Am and TWA traditionally transported the lion’s share of U.S. passengers flying in international markets. During 1974 the former was responsible for 44% of the aggregate scheduled international miles flown by U.S.
corresponding routes to the U.S. behemoth, United Airlines.\textsuperscript{244}

Since 1980, Pan Am's operating losses have exceeded $1 billion.\textsuperscript{245} As a consequence, it flies one of the oldest fleets of transcontinental aircraft of any international carrier. In 1984, it was the only major U.S. carrier to incur operating losses, which amounted to $135.2 million.\textsuperscript{246} Pan Am's problems in the Pacific market may have been exacerbated by the U.S. "open skies" policy.\textsuperscript{247} As Pan Am explained its decision to abandon Asia:

With the advent of U.S. policies to open up international markets, many new U.S. and foreign carriers have initiated international service, in many cases concentrating on markets in which they have well-established hub and feeder systems. In 1979-80, major new transpacific services were instituted to the United States by Singapore Airlines, Korean Air, Philippine Airlines, Thai

\begin{footnotesize}
\begin{enumerate}
\item[A] A Recovered Pan Am Faces Tomorrow's Hurdles, BUS. WEEK, June 4, 1984, at 60. See generally, A. Sampson, supra note 2, at 126.

In 1980 and 1981 Pan Am suffered total operating losses of $415 million. By selling certain assets, such as its hotel chain, at a profit, Pan Am was able to show a net profit of about $61 million, but in the process, it virtually exhausted its credit. Today, it is doubtful that it could raise a very significant amount of money. Certainly its ability to finance new aircraft is seriously constrained.

During the same period, British Airways and Air France also suffered very large losses. But no one contemplates that either of these carriers might go out of business or be denied credit. . . . A government guarantee will cure any misgivings that potential security holders have, and one can be confident that their capital needs will be met.

Due to this circumstance, we have witnessed for several years the phenomenon of foreign airlines, many of which have been chronically unprofitable, replacing the older models in their fleets with newer and more efficient aircraft and selling their old planes to U.S. carriers. . . . Those who like to pretend that we have, or can have, a free market in international aviation are dreadfully naive.


Prior to the sale of its transpacific routes and corresponding aircraft to United, Pan Am served the U.S.-Latin America, U.S.-Asia, and U.S.-European markets. The former is the least liberalized, the latter is the most liberalized, and U.S.-Asia is mixed. Curiously, Pan Am sold the U.S.-Asia market to United not only to raise badly needed capital and retire some of its overwhelming debt, but also so that it could expand its transatlantic operations. Pan Am still retains the highly profitable routes to Latin America, an area which has largely rejected "open skies."

\item[B] Joint Application of Pan American World Airways, Inc., and United Airlines, Inc., April 22, 1985, on file at the U.S. Dep't of Transportation in Docket 43065, at 19 [hereinafter cited as Pan Am-United Application].

\item[C] Id. at 19.

\item[D] The U.S. Department of Transportation found to the contrary:

Pan American's loss of market share in the past ten years has not been to foreign-flag competition. In fact, the U.S.-flag share of U.S.-Pacific traffic has held steady at 44 percent, and the U.S.-flag share of the U.S.-North Central Pacific traffic has actually increased three percent to 45 percent.

\end{enumerate}
\end{footnotesize}
Airlines and China Airlines.248

Ten other airlines provide direct scheduled service between the United States and Japan, and two or three new U.S. carriers could be added under proposed amendments to the bilateral agreement. United States-Hong Kong is also served by nine other carriers, and in addition more than a dozen U.S. carriers have been authorized to serve that multiple-designation market.249

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Operating Profit</th>
<th>Net Profit</th>
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<tbody>
<tr>
<td>1970</td>
<td>$(29,866)</td>
<td>$(48,458)</td>
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<tr>
<td>1971</td>
<td>16,240</td>
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</tr>
<tr>
<td>1972</td>
<td>(1,938)</td>
<td>(33,181)</td>
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<td>(1,699)</td>
<td>(26,252)</td>
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<td>1974</td>
<td>(98,598)</td>
<td>(81,744)</td>
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<tr>
<td><strong>1970-1974</strong></td>
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<td><strong>$236,166</strong></td>
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<td><strong>$280,574</strong></td>
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<td>1981</td>
<td>(377,431)</td>
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<td>1982</td>
<td>(372,736)</td>
<td>(485,331)</td>
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<tr>
<td>1983</td>
<td>13,131</td>
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<tr>
<td>1984</td>
<td>(135,216)</td>
<td>(206,836)</td>
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<tr>
<td><strong>1980-1984</strong></td>
<td><strong>$(1,001,866)</strong></td>
<td><strong>$(61,801)</strong></td>
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<tr>
<td>1970-1984</td>
<td>$(865,131)</td>
<td>$(637,393)</td>
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1 Includes $294.4 million from sale of Pam Am Building.
2 Includes $222.1 million from sale of Intercontinental Hotel

Pan-United Application, supra note 245, Exhibit C.

248. Pan Am-United Application, supra note 245, at 19.
249. Id. at 22 [citations omitted]. The following carriers are authorized to serve the U.S.-Japan market:

Northwest, Continental (Air Micronesia), Flying Tiger (cargo only), JAL, China Airlines, Korean Air, Singapore Airlines, Philippine Airlines, Thai International, and Varig. The list includes European Airlines which carry passengers between Toyky and Anchorage (British Airways, Air France, Sabena, etc.) and connecting service through Vancouver available from CP Air. Also excluded are charter services, now available to Japan on a limited basis.

Id. at 22, n.1 The following carriers serve the U.S.-Hong Kong market:

Northwest, Continental, Flying Tiger (cargo only), JAL, Korean Air (connections), CP Air (connections), and Philippine Airlines (connections). Excluded from this list are Cathay
Pan Am's share of the Pacific market fell from 29.9% in 1978 to 13.7% in the first ten months of 1984.\textsuperscript{250} Between 1960 and 1984, foreign-flag carriers increased their share of the transpacific market by 23 percentage points.\textsuperscript{251} In response to the economic difficulties faced by the U.S. airline industry, social Darwinist Alfred Kahn said, "It's destructive and it's

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<th>Year</th>
<th>Total Industry</th>
<th>U.S. Flag</th>
<th>Foreign Flag</th>
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Percentage Point: -26 +26
Change 1960-1984

U.S. - South Pacific

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<td></td>
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<td>Share</td>
<td>Passenger</td>
</tr>
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<td>1960\textsuperscript{1}</td>
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<td>1975</td>
<td>687</td>
<td>342</td>
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</tr>
<tr>
<td>1980</td>
<td>1,154</td>
<td>554</td>
<td>48</td>
</tr>
<tr>
<td>1984\textsuperscript{2}</td>
<td>1,104</td>
<td>492</td>
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Percentage Point: -6 +6
Change 1960-1984

U.S. - Total Pacific

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<td></td>
<td>Passenger</td>
<td>Share</td>
<td>Passenger</td>
</tr>
<tr>
<td>1960\textsuperscript{1}</td>
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<td>2,265</td>
<td>1,260</td>
<td>56</td>
</tr>
<tr>
<td>1975</td>
<td>3,209</td>
<td>1,402</td>
<td>44</td>
</tr>
<tr>
<td>1980</td>
<td>5,721</td>
<td>2,439</td>
<td>43</td>
</tr>
<tr>
<td>1984\textsuperscript{2}</td>
<td>6,165</td>
<td>2,700</td>
<td>44</td>
</tr>
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Percentage Point: -23 +23
Change 1960-1984

\textsuperscript{1} Includes charter traffic.
\textsuperscript{2} January-October 1984.

Source: DOT/INS-U.S. International Air Travel Statistics reduced 5% to exclude industry discount and non-revenue passengers.
Pan Am-United Application, supra note 245, Exhibit I.

Pan Am provided the following summary of the growth of foreign-flag carriers in the transpacific market:

JAL, the predominant carrier in the United States-Pacific market overall, has consistently been the major force in service between the United States and Japan; its 40-percent-plus share has been unshakable, consisting as it does, not only of local Japanese originating traffic, but also of tremendous flows of traffic through its Tokyo hub. With two new U.S. points added in 1983 (Seattle and Chicago), JAL now operates 9
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<tbody>
<tr>
<td>日本交通的Pan Am百分比</td>
<td>23.2</td>
<td>25.6</td>
<td>30.1</td>
<td>27.3</td>
<td>25.0</td>
<td>22.0</td>
<td>19.9</td>
<td>21.0</td>
<td>16.7</td>
</tr>
<tr>
<td>北太平洋中央的Pan Am百分比</td>
<td>24.2</td>
<td>26.2</td>
<td>30.1</td>
<td>26.6</td>
<td>23.4</td>
<td>21.5</td>
<td>19.3</td>
<td>18.1</td>
<td>14.3</td>
</tr>
<tr>
<td>所有太平洋的Pan Am百分比</td>
<td>24.8</td>
<td>26.9</td>
<td>29.9</td>
<td>26.7</td>
<td>22.9</td>
<td>20.7</td>
<td>18.3</td>
<td>17.3</td>
<td>13.7</td>
</tr>
</tbody>
</table>

来源：INS数据。1984年的百分比份额基于1984年前三个月的数据。

Pan Am-United申请，supra note 248，Exhibit G.
cruel, but that's the way the market functions."\textsuperscript{252} By the early 1980s, the average age of the U.S.-flag fleet had grown to 8 years; in contrast, their foreign-flag competitors had a fleet average age of only 4.6 years. Of the 750 fuel-efficient intercontinental aircraft in operation, 74% were flown by foreign carriers.\textsuperscript{253} Only 10% of the 200 intercontinental aircraft on order was placed by U.S. carriers; the remaining 90% was designated for foreign fleets.\textsuperscript{254}

daily frequencies to the United States, and more are planned. The carrier also recently announced an expansion and modernization of its fleet.

In addition to JAL, U.S. carriers have had to face a new group of competitors in service between the United States and Japan in 1980. Philippine Airlines started service in this market in 1983, and China Airlines and Korean Air have added new frequencies with modern, widebody equipment. [In February of 1985] the Malaysian Airline System (MAS) obtained fifth-freedom rights between Tokyo and the U.S. West Coast and, more recently, announced joint operations and JAL and Northwest and the operation of independent services between Tokyo and the United States in 1986.

* * *

Strong foreign competition exists throughout the North Central Pacific. Starting in 1957 with rights to serve only Alaska and Seattle, Korean Air now has rights to serve Los Angeles and Honolulu (with fifth-freedom rights from Japan), New York, and Chicago and Oakland. China Airlines' U.S. routes were substantially expanded in 1980, and Singapore Airlines has emerged as a significant competitor from Singapore, Taipei, and Hong Kong, as well as Tokyo. Cathay Pacific initiated nonstop 747 service from Hong Kong to Vancouver in 1983, an operation that has been expanded from two to three weekly flights. CAAC initiated service to the United States in 1981, and Philippine Airlines now serves three U.S. Gateways (Los Angeles, San Francisco, and Honolulu).

In the South Pacific, Quantas, the Australian national carrier, and Air New Zealand have consistently held large shares of that market since the late 1970s. Pan Am's market share has declined considerably because of growing operations by UTA and CP Air, and most importantly, by Continental's growth in the market.

\textit{id.} at 23-26 [citations and references omitted].

\textsuperscript{252} \textit{Transportation Deregulation}, supra note 71, at 371.

\textsuperscript{253} \textit{House Hearings on International Aviation}, supra note 73, at 135-36 (statement of William T. Seawell). Pan American flew the world's oldest fleet of wide-bodied aircraft. \textit{id.} at 135. And because of serious economic losses, capital did not exist for fleet modernization and expansion. The cost of a single 747 with spare parts was $75 million. \textit{id.} at 136. "If present trends continue, we will confront modern, efficient, expanding foreign fleets while saddled with obsolescent, less fuel-efficient equipment—and the prospect of inevitable, continuing operating deficits and further system shrinkage which use of these models will entail." \textit{id.} at 137. Similar sentiments were expressed by TWA's CEO, C.E. Meyer, Jr., \textit{id.} at 207. These difficulties are exacerbated by the fact that foreign carriers are able to secure low-interest loans on aircraft manufactured in the United States from the U.S. Export-Import Bank (Eximbank). During 1980, Eximbank loaned 27 nations $1.7 billion to purchase aircraft at interest rates ranging from 8% to 9.25%—substantially below the 20-21% rates available from private financial sources to U.S.-flag carriers, inflated by their poor credit rating. \textit{id.} at 190, 236 (statement of William T. Seawell). On many of these loans, the foreign airlines have no interest payments for the first 5-to-12 years after they are made. \textit{id.} at 235 (statement of Rep. Bob McEwen (R-Ohio)).

\textsuperscript{254} \textit{id.} at 37-38 (statement of C.E. Meyer, Jr.). By the end of 1983, the picture was even more dismal. Of the 38 long-range intercontinental wide-bodied aircraft on order, only 4 were designated for U.S. carriers. The average age of the U.S.-flag intercontinental fleet had grown to 9.4 years, compared to 6.2 years for foreign carriers. M. BRENNER, supra note 75, at 118. The long-term implications are dire, for "fleet composition is important to cost efficiency and the ability to operate profitably at prices that the competitive market will permit." \textit{id.} at 117.
The strength of the U.S. dollar in the mid-1980s sent an unprecedented flow of U.S. tourists abroad, somewhat ameliorating these financial woes.\textsuperscript{255} Growth in traffic, the end of recession, declining fuel prices, the demise of transatlantic loss leaders Laker and Air Florida, and management maturity in avoiding disastrous fares wars led to improved carrier economic health by the mid-1980s.\textsuperscript{256} Moreover, the squeeze on profits engendered by the increased competition unleashed by deregulation has strongly motivated airline management to insist on higher levels of efficiency, enhanced productivity, and lower labor costs. The confrontation between management and labor in this industry since deregulation began has been fierce. Nevertheless, it must be admitted that the industry as a whole had become lethargic under regulation. Hence, the disciplines imposed by the Darwinian marketplace have led to higher levels of carrier efficiency, an improved allocation of resources, and lower prices for many consumers. And indeed, freedom to lower (and raise) prices has enabled carriers to tap the price elasticities of the marketplace to maximize profits the non-discretionary (\textit{e.g.}, business) traveler, and fill seats which might otherwise have flown empty with the discretionary (\textit{e.g.}, vacation) traveler. In less competitive markets, prices have generally been set higher than those in highly competitive markets. As a result, a number of U.S.-flag carriers have enjoyed healthier profits in some years since deregulation. Nevertheless, the usual profits recently enjoyed by some U.S. carriers tend to obscure their unsatisfactory long-term economic position,\textsuperscript{257} and problems of discrimination and unfair methods of

\textsuperscript{255} While general economic conditions significantly influence the total amount of travel, the nationality of travelers is strongly affected by relative currency values (rates of exchange). There has been an unanticipated surge in the value of the dollar.

\textit{M. Brenner, supra} note 75, at 106.

A strong dollar makes it more expensive for foreigners to visit the United States; a weak dollar serves as a magnet. Conversely, a strong dollar reduces the cost of foreign travel for Americans. In 1983/1984 the dollar was at historic peaks against many other major currencies.

\textit{id.} at 106.

It is likely that if European currencies strengthen, or the world adjusts to the 1983/1984 strength of the dollar, the U.S. citizen percentage of U.S.-Europe travel will diminish and the overall U.S. airline share will drop to 45 percent or less—the situation that prevailed before the drive for "Open Skies."

\textit{id.} at 110.

\textsuperscript{256} 1984 was projected to be the first year that the world's airlines would be in the black since 1978. IATA projected a net profit for 1984 of approximately $800 million. It also noted that member airlines would have to send about $200 billion over the next decade to purchase new equipment. \textit{Airlines Back in the Black}, New York Times, Dec. 31, 1984, at A39, col. 3.

\textsuperscript{257} \textit{M. Brenner, supra} note 75, at 114. Melvin Brenner and his colleagues made a comprehensive economic study of the U.S. airline industry during the period 1972-1983. They explained why they chose this time frame for analysis:

Not only does this provide almost the same number of years before and after the 1978 "swing" year, but 1972 is a reasonably "normal" year and which to begin. The 1970/71 recession was past, and 1972 was a good recovery year; the recession of
competition in foreign markets persist.

V. A CRITIQUE OF THE IMPLEMENTATION OF U.S. INTERNATIONAL AVIATION POLICY

A. INDUSTRY CRITICISM OF "OPEN SKIES"

Many U.S.-flag carriers vehemently criticized their government's "open skies" policy of giving foreign airlines access to lucrative interior U.S. points ("hard rights") for imprecisely defined promises of pricing flexibility and prohibitions against anticompetitive behaviour ("soft rights"). As Lawrence Nagin, Vice President of the Flying Tiger Line, Inc., noted:

In drafting the Federal Aviation Act, Congress concluded that aviation policy should follow a course designed to promote, encourage, and develop a viable privately owned U.S. air transport industry as a vehicle for U.S. aviation policy, and to strengthen the competitive position of U.S. air carriers to at least equality with that of foreign air carriers.

There is no question that in the late 1970s and early 1980s our negotiators had lost sight of these objectives in their zeal to export deregulation.

Similarly, William A. Kutzke, Vice President of Northwest Airlines, found himself disagreeing with the merits of the "open skies" policy, and the pragmatic difficulties its implementation has created:

[T]he concept of liberal bilateralis is good in theory but in practical effect is not realistic in the context of international aviation. To obtain these agreements, the U.S. must trade hard rights including valuable U.S. routes to a foreign country to obtain a fundamentally different approach to aviation policy. This approach just did not work.

* * *

Not uncommonly the liberal bilateralis require repeated rounds of consultation and repeated discussions in order to reach any resolution [of disputes

1974/75 was still to come. Also, 1972 was the last full year that preceded the 1973 Arab oil embargo, and the beginning of sharp fuel price increases.

Id. at 107 (citation omitted). When discussing the long-term profitability of U.S. carriers, their conclusions were pessimistic:

On an overall basis, despite extremely good, recent experience, long-haul international air transportation is not a business in which to get rich. Over the entire 12-year period, operating profit in [U.S.-Europe, U.S.-Asia and U.S.-South America] aggregated only $927 million on total revenues of $43 billion—an operating profit margin of little over 2 percent. Operating profit failed to cover interest expense, which amounted to a total of $1,152 million.

Id. at 116.

258. Such criticism was particularly robust during the early 1980s, when the economic impact of "open skies" was initially being felt.

involving foreign anticompetitive conduct.\(^{260}\)

The focus of U.S. negotiators has been significantly different from that of foreign negotiators. During the Carter Administration, U.S. negotiating strategy shifted away from discrete operating problems, to one of employing the complaints as a catalyst for altering the fundamental structure of the agreement—in other words, as another opportunity for expanding the “open skies” philosophy to additional markets.\(^{261}\) Many industry executives complained of the apparent inability of their government to engage in effective negotiations to reduce non-tariff barriers in international aviation.\(^{262}\) As C.E. Meyer, Jr., President of TWA, remarked, “Foreign governments often negotiate with the primary goal of providing economic advantages for their flag-carriers, while the United States frequently concentrates exclusively on obtaining liberal agreements.”\(^{263}\)

**B. CONGRESSIONAL CRITICISM OF “OPEN SKIES”**

Congressman Elliott Levities (D-Ga.), who chaired extensive hearings on the subject in the early 1980s, concluded that U.S. negotiators

\(^{260}\) *id.* at 64, 67 (statement of William A. Kutzke).

\(^{261}\) The rationale for this approach has been summarized as follows: “[I]f the underlying policy differences can be resolved, not only will the specific operating problem be eliminated, but also the framework to avoid future confrontations on the same issue will have been constructed. In addition, by this expansion, some of the emotionalism surrounding individual issues can be dissipated, and a more dispassionate atmosphere created that may foster compromise and accommodation.” *House Hearings on International Aviation, supra* note 73, at 25 (statement of Frank C. Conahan).

\(^{262}\) Thomas F. Grojean, President of the Flying Tiger Lines, Inc., came close to calling U.S. negotiators “wimps”:

> The foreign governments . . . are very perceptive as to how strong the U.S. government is going to react, and I think in the last several years they have perceived a weakness in the part of our Government in not really putting any teeth in the negotiations. So they feel they can get away . . . with disregard of any of the provisions of the original agreements that they so choose. . . . We need to convey a statement of, “we are not going to be easily regarded in our negotiations’ and just get tough and show some teeth and foreign governments will recognize this change in attitude and there will be little need for any legislative changes.” *House Hearings on International Aviation, supra* note 73, at 417.

\(^{263}\) See *CAB Order 78-9-2*, at 6 (1978).
were often less prepared and more disorganized than their foreign counterparts and had frequently failed even to discuss their agenda with American industry and consumer representatives. With respect to unfair competitive practices, the U.S. General Accounting Office found that the government had no system for receiving, monitoring, or processing the informal complaints of U.S.-flag carriers and that the industry was reluctant to file formal complaints because of inordinate time consumed by their processing and the potential for retaliation by foreign governments. Moreover, there seemed to be a widely held consensus that the United States was pursuing its zealous dedication to “open skies” irrespective of its direct or indirect effects upon the economic health of U.S.-flag carriers. And having irritated so many foreign governments with its persistent insistence on an ideology most found ill-conceived, the United States appeared by many to shy away from further jeopardizing the “open skies” movement by acting forcefully to resolve U.S. carrier complaints of discrimination and anti-competitive behavior by foreign governments and their airlines. Signing another pro-competitive bilateral seemed to some to take higher priority than enforcing the fair opportunity to compete clauses in the ones which had already been concluded.

In August 1983, the Subcommittee on Investigations and Oversight of the House Committee on Public Works and Transportation issued a report which was sharply critical of U.S. implementation of international aviation policy. As to the “open skies” policy, the Subcommittee agreed with the U.S. airline industry that “we have been giving up routes and schedules of greater economic value than we have been getting. . . .” It concluded that the United States should no longer “trade hard rights for soft rights.”

The Oversight Subcommittee also criticized the administration’s attack on the International Air Transport Association:

The IATA has been a multilateral forum for establishing airline fare structures for many years. Although it has its limitations, it still has the strengths of airline involvement in a multilateral forum to develop fare schedules subject to approval by the governments involved. The CAB show-cause order and the open skies policies have seriously undermined IATA and possibly caused the airlines and foreign governments to pursue nationalistic policies with respect to the United States—such as escalation in unfair and discriminatory

264. House Hearings on International Aviation, supra note 73.
265. Id. at 565.
267. Id. at 17. The Committee also believed that the U.S. government should not “negotiate aviation rights for benefits in other economic sectors”. Id.
practices. It therefore urged "a return to active participation in IATA and other international forums." But the Subcommittee’s most pointed criticism was directed at the inability of U.S. negotiators to respond forcefully to problems of discriminatory and unfair competition practices in foreign markets. It reminded the Administration of IATCA’s insistence that such anticompetitive conduct not be tolerated and urged a firmer implementation of its mandate, including the imposition of unilateral sanctions where appropriate. It also offered specific suggestions as to how U.S. negotiations might be more effectively conducted:

It is clear that a much firmer position needs to be taken in international negotiations to insure that discriminatory practices are eliminated and valuable economic routes are not traded away. Our examination of these issues demonstrates that the agencies must improve the negotiating process through earlier and more intensive involvement of our flag carriers, improved agency technical capability, continuation of personnel and policy over time, and closer interagency coordination.

In 1984, the ranking minority member of that Subcommittee, Congressman Guy Molinari (R-N.Y.), criticized the implementation of U.S. international aviation policy in still stronger language:

268. Id. at 16.
269. Id. at 18.
270. The Committee found the implementation of U.S. aviation policy with respect to non-tariff barriers in international markets as virtually a failure in carrying out legislatively mandated policy:

Our most obvious and most fully documented deficiency is in our failure to respond forcefully to foreign discriminatory and unfair competitive practices. As a result, there is not a fair and equitable market for our carriers in international transport. Airlines often pay higher prices for fuel. They often pay excessive user charges for landing fees, navigational fees, and comparable services that are either free or cost foreign airlines much less in the United States. They are denied full access to computer reservations systems in some countries. They must use inefficient and indigenous groundhandling crews in some countries. In several Asian countries, they can’t get their revenues converted from foreign currency to U.S. currency in a reasonable period of time.

Id. at 15.
271. Said the Committee:

The Act is clear that discriminatory practices are not to be condoned and that our government is to develop firm policies to deal with them—including taking action against the other country’s airline if such problems persist. [We believe] that a much firmer implementation of the Act is needed.

Id. at 16.
272. Id. at 17. See A. SAMPSON, supra note 2, at 46. Dr. Gertler summarized carrier participation in international aviation negotiations as follows:

[Professor Lowenfeld points out that] “U.S. carriers are not parties to the negotiations, and indeed, often have disagreements among themselves.” The industry, of course, as a rule consulted and the representatives of its association may have observer status at negotiations. In the practice of other countries the situation as to consultations with the industry is similar with the notable difference that representatives of a national airline are usually full-fledged members of the delegation.

Gertler, supra note 43, at 797 [citation omitted].
The international aviation negotiations conducted by the United States . . . have been terrible, to put it mildly. It appeared that we would give away anything in exchange for a signature on a piece of paper and even at that we were unconcerned about whether the other side lived up to the agreement that they had signed.

* * *

The hearings which took place in 1981 and 1982 held by this subcommittee made it abundantly clear that the United States was being viewed as a patsy by many foreign governments and that the attitude on the part of some of our negotiators was less than what could be desired.273

C. THE EMERGING ROLE OF THE U.S. DEPARTMENT OF TRANSPORTATION

There is some evidence, at least, that the Reagan Administration is taking a tougher stance on negotiating bilaterals and in ensuring a competitive environment free of discrimination and unfair methods of competition. The last Chairman of the Civil Aeronautics Board, Dan McKinnon, a Reagan appointee, noted the policy shift:

[T]here is today, I believe, much greater concern within the U.S. Government for the long-term health of the U.S. aviation industry. We are now insisting [that] foreign governments live up to agreements they made in return for access to lucrative U.S. markets. U.S. aviation policy has stiffened with demands of a balanced quid pro quo in all future agreements.

I feel confident in saying that the MOU with Korea signed in 1980, as well as several other agreements signed about that time with other countries in Asia could not have been negotiated or agreed to under U.S. aviation policy as it is being implemented today.274

With the sunset of the Civil Aeronautics Board on January 1, 1985, the remaining regulatory functions over aviation were transferred to the U.S. Department of Transportation, a cabinet-level Executive branch agency. Jurisdiction over international aviation was vested in DOT’s Office of Policy and International Affairs, headed by Assistant Secretary of Transportation Matthew V. Scocozza. In addressing the American Bar Association in April 1984, Secretary Scocozza indicated that the Reagan policies in this area would differ from its predecessors:

Over the past four and one-half years of the Reagan Administration, we have been facing reality—that is, dealing with the fact that most of our foreign trading partners are unwilling to lower constraints and allow competition to flourish. As a result, U.S. aviation negotiators have become very stingy with handing out or trading new economic rights to foreign airlines.275

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274. Id. at 1256 (testimony of Dan McKinnon).
275. DOT’s Policy Leader Says U.S. Will Swap Rights for Less Foreign Regulation, TRAFFIC WORLD, Apr. 29, 1985, at 45. He continued:

There are several foreign governments wishing to obtain authority for their-flag airline to
While the United States may no longer be trading access to interior U.S. markets for pricing and operational flexibility, one negotiator noted that the reason may be simply that there are few new routes left to trade, all feasible markets having been given away to foreign carriers during the Carter Administration; "We can't just create a new Chicago-Zurich route." 276

Prior to 1985, initial licensing, ratemaking and antitrust decisionmaking was vested in the U.S. Civil Aeronautics Board, an independent regulatory commission established in 1938 and comprised of five members, no more than a simple majority of whom could be members of a single political party. 277 Each was appointed by the President, with the advice and consent of the Senate, for multi-year overlapping terms, and none could be removed prior to the expiration of his term without cause. Congress intentionally placed the agency outside the Executive Branch of government to shield it from the political winds that blow down Pennsylvania Avenue. 278

During the Watergate Hearings in 1973, evidence came to light of surreptitious airline contributions to Presidential candidates, and questionably motivated Presidential influence over the issue of lucrative international air routes. Senator Sam Ervin (D-N.C.) asked, "Is it not fair to say that if there is any industry in the United States which is peculiarly susceptible to express or implied pressure from people exercising government powers, it is the airlines?" 279 George Spater, whose American Airlines had donated $75,000 cash to Nixon's Committee to Re-Elect the President [CREEP], admitted the truth of Sen. Ervin's hypothesis. Shortly thereafter, Congress amended the Administrative Procedure Act with the Sunshine Act, which insists that federal administrative agencies

operate to new U.S. cities, particularly in the south and southwest. Their desires to inaugurate service to Atlanta, Dallas/Fort Worth, and other points fit nicely with the desires of these communities to increase their access to the international marketplace and stimulate local economic growth. Their desires also dovetail with the DOT's view that international air service expansion should occur at cities other than the traditional gateways. We would like to promote inter-gateway competition, increase convenience for travelers and shippers while, at the same time, hopefully relieving congestion at JFK, Chicago, and Los Angeles. The only obstacle standing in the way to these developments is the unwillingness of foreign governments to loosen their regulation of U.S. airlines and provide a more flexible operating environment. The bottom line is simple: The U.S. Government is willing to deal when there is a real deal to be made.

Id.


277. See The Rise and Fall of the Civil Aeronautics Board, supra note 52.


279. A. Sampson, supra note 2, at 134.
hold virtually all their decisional meetings in public view. 280 And, in the 
Airline Deregulation Act of 1978, Congress sought to diminish Presidential 
influence over international operating authority cases by reducing his 
veto powers under section 80-1 of the Federal Aviation Act to disapproval 
"solely upon the basis of foreign relations or national defense consider-
ations which are within the President's jurisdiction, but not upon the basis 
of economic or carrier selection considerations." 281

With the execution of the Civil Aeronautics Board in 1985, its remain-
ing responsibilities were vested in the U.S. Department of Transportation, 
a cabinet-level Executive branch agency quite close to the President. The 
agency's Secretary, and its Assistant Secretary for Policy and Interna-
tional Affairs are appointed by, and serve at the discretion of the Presi-
dent. Also, under the Reagan Administration, DOT, rather than the State 
Department, has been given the lead role in negotiating international aviation 
issues with foreign governments. The advantage of centralizing most of 
the nation's jurisdiction over international civil aviation in a single ad-
mnistrative agency is that pursuit of national policy can be effectuated 
more expeditiously, efficiently, and economically. While the agency's 
small staff was widely recognized as among the most talented and effi-
cient in Washington, the five-member Civil Aeronautics Board rarely 
spoke with a single voice, and often collectively mumbled or stuttered. 
But centralization of vast power over an important infrastructure industry 
leads one to ask the rhetorical question: if power corrupts, does absolute 
power corrupt absolutely?

In promulgating the Civil Aeronautic Sunset Act of 1984, the House 
Committee on Public Works and Transportation expressed strong reserva-
tions about whether DOT would be properly shielded from Presidential 
political influence:

Our concern has been that a Secretary of Transportation or a high-level political official in the Department would find it difficult to limit his or her focus on the statutory criteria. DOT Secretaries and Assistant Secretaries are high ranking political officials of the Executive Branch and have an interest in furthering their Administration's legislative and political programs. 282

282. HOUSE COMM. ON PUBLIC WORKS & TRANSPORTATION, CIVIL AERONAUTICS BOARD SUN-
The U.S. Department of Transportation has responded to these concerns by promulgating rules seeking to vest initial decisionmaking on international aviation cases in semi-autonomous Administrative Law Judges (who must hold formal on-the-record hearings) and senior career officials, with review thereof by the Assistant Secretary for Policy and International Affairs and the President, either of whom may veto and remand the lower-level determination.\footnote{283}

Prior to 1978, section 801(a) of the Federal Aviation Act provided that the issuance of operating authority “to engage in overseas or foreign air transportation . . . shall be subject to the approval of the President.”\footnote{284} Section 801(b) of the Act\footnote{285} provided that the President could disapprove action taken by the CAB under section 1002(j) thereof,\footnote{286} (i.e., in the suspension, cancellation or rejection of rates governing foreign air transportation), provided that his “disapproval is required for reasons of the national defense or the foreign policy of the United States . . . .”\footnote{287} The differences in the statutory language concerning Presidential discretion over entry, on the one hand, and over rate determinations, on the other, suggested that the President held virtually unlimited discretion to reject the former, but that he could only reject the latter for reasons of national defense of foreign policy.

The United States Supreme Court, in \textit{Chicago & Southern Air Lines, Inc. v. Waterman Steamship Cor.},\footnote{288} concluded that Presidential decisions under section 801 were exempt from judicial review.\footnote{289} Although the \textit{Waterman} doctrine has been criticized by numerous commentators,\footnote{290} Congress has not seen fit to amend the Act to rectify the problems arising as a result of this exemption from judicial scrutiny.\footnote{291} and the fed-


\footnote{284. 49 U.S.C. § 1461(a).}

\footnote{285. 49 U.S.C. § 1461(b).}

\footnote{286. 49 U.S.C. § 1482(j).}

\footnote{287. Section 801(b) was added as an amendment to section 801 in 1972. Pub. L. No. 92-259, § 2, 86 Stat. 95, 96 (1972).}

\footnote{288. 333 U.S. 103 (1948).}

\footnote{289. \textit{Id.} This interpretation was based upon a construction of Section 1006(a) of the Civil Aeronautics Act, 49 U.S.C. § 646 (now 49 U.S.C. § 1486(a)), which provides for judicial review of any CAB order that is administratively final, “except any order in respect of any foreign air carrier subject to the approval of the President as provided in section 801 of this Act. . . .” Hence, it does not explicitly shield presidential decision under section 801 concerning U.S.-flag carriers engaged in foreign commerce.}


\footnote{291. However, Senator Howard Cannon proposed legislation in 1976 that would have re-
eral courts have consistently upheld the doctrine’s applicability. The absence of “checks and balances” provided by judicial oversight in effect means that the real limits to Presidential discretion under section 801 are few: political pressure; the remote likelihood of Congressional action via statutory amendment; and the conscience of the Chief Executive.

In the Airline Deregulation Act of 1978, however, Congress amended section 801(a) to constrict the President’s theretofore virtually unlimited discretion in route proceedings.\textsuperscript{292} As a result of this amendment, he may now disapprove action in entry proceedings “solely upon the basis of foreign relations or national defense considerations which are within the President’s jurisdiction, but not upon the basis of economic or carrier selection considerations.”\textsuperscript{293} To the extent that the amendment limits Presidential review to those instances in which overriding reasons of foreign policy or national defense require his intervention, it is to be applauded; it does not, however, explicitly permit judicial review to determine whether a Presidential decision of such a prescribed nature is in fact legitimate. Hence, the Waterman doctrine lives, and the judicial branch will presumably continue its unfortunate self-imposed quarantine.

Centralizing power over international aviation in a single agency may well enhance the ability of the U.S. government to respond promptly and more effectively to problems of discrimination and anticompetitive conduct in foreign markets. Let us so hope. But the lucrative value of many of the operating route, ratemaking, and merger decisions may one day tempt carriers to exploit their political leverage or the pecuniary appetite of weaker men in government to seduce favorable consideration. From the early days when Juan Trippe was building infant Pan American World Airways into a global empire, prudent corporate executives of U.S.-flag carriers have recognized that their fate would largely be dictated in Wash-

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\end{flushright}
Even in an era of partial deregulation, government can ameliorate the pain of the downward curve of the market cycle when it so chooses, and must continue to dispense scarce resources among multiple applicants. While the Benelux model and the "open skies" ideology seek to reduce the government's role, it must be remembered that the overwhelming majority of nations still have rejected U.S. free-market initiatives and refused to consummate a Benelux-type bilateral. And many which would permit multiple entry simply lack the traffic base to support it. Hence, selection of one over another applicant remains a regulatory responsibility of the U.S. government in international aviation, and one which confers potentially vast pecuniary rewards.

So long as so many nations are unwilling to permit designation of more than a single U.S.-flag carrier on international routes, some administrative body will be required to designate which single carrier shall serve those routes. It is hoped that such decisions will remain free from the influences of partisan politics. The decisional body must remain semi-autonomous if political influences are to be avoided. If the integrity of such autonomy can be maintained, then the existence of such responsibilities over international transportation within the Executive Branch may not be wholly objectionable.  

VI. CONCLUSION

"Open skies" was implemented with the best of intentions. Its proponents insisted that increased competition would inure to the benefit of consumers by giving them the range of price and service options reflecting their votes of dollar approval in the marketplace; carriers would become more efficient as they responded to consumer needs; and the world's resources would be more efficiently allocated.

Nevertheless, its method of implementation in the international arena was abrupt, brazen and wholly undiplomatic. The means chosen generated unnecessary hostility in an area of our foreign policy which had long been characterized by warm and friendly relations. And "open skies" may have contributed to the severe economic injury suffered by many airlines operating in international markets.

Deregulation may have had positive effects during its initial years in domestic markets. But to assume that the same free market principles would work as well internationally, in an industry so dominated by govern-

294. See A. Sampson, supra note 2, at 44-45.
ment ownership and subsidization, was to foster theory at the expense of reality. Moreover, even the initial successes of domestic airline deregulation have been called into question as it has matured, with the industry becoming increasingly concentrated, and with levels of service and margins of safety deteriorating.

The more cautious approach to liberalization of the Reagan administration is a welcome respite from the days of belligerent international economic policy. But one cannot help but be concerned that with the demise of the independent Civil Aeronautics Board on January 1, 1985, such vast powers over an industry so important to the national economy as international aviation is now centralized in an executive branch agency—the U.S. Department of Transportation. One of the reasons the domestic industry has become so concentrated in such a remarkably short period of time is that DOT appears simply to have decided to abdicate its regulatory responsibilities, thereby fostering the Reagan administration’s policy of less government.

With such fanfare, we have entered this brave new world of liberalization in international aviation. But the metamorphosis is not yet complete. We must continue to weigh and balance the costs and benefits of this policy, and adjust its application to serve the public interest. The invisible hands of Adam Smith create one set of imperatives. The hand of government on the dial of regulation create another; if prudently employed, it can accentuate the benefits of market theory, while diminishing its costs, and foster public policy objectives beyond allocative efficiency. The international dimensions of aviation make it inevitable that government will continue to play a role, turning the dial to more regulation, or less, as public needs demand.

State and Local Nuclear Transportation Permit and Fee Requirements

STEVEN C. GOLDBERG*

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A. INTRODUCTION

The purpose of this paper is to address the legality of state and local nuclear transportation permit and fee requirements. To place this subject in perspective, the statutory and regulatory scheme governing nuclear transportation, including the operative constitutional, judicial and administrative principles, is also discussed.

Federal nuclear transportation jurisdiction is shared primarily by the Nuclear Regulatory Commission (NRC) and the Department of Transportation (DOT). The NRC derives its authority pursuant to the Atomic Energy Act (AEA) and implementing regulations. The DOT's authority is derived pursuant to the Hazardous Materials Transportation Act (HMTA) and implementing regulations (all transport modes) as well as the Federal Railroad Safety Act (FRSA) and implementing regulations (railroad mode). This paper will discuss and explain the statutory and regulatory framework embodied in the above authorities, both generally and in relation to state and local permit and fee requirements. Also examined are the relative roles and responsibilities of the federal, state and local governments in the nuclear transportation area. By its express terms, the Nuclear Waste Policy Act (NWPA) does not alter the preexisting nuclear transportation statutory and regulatory scheme.

As a background matter, the paper identifies certain underlying constitutional principles that generally serve to restrict state and local nuclear transportation regulation in interstate commerce given the extensive nature of federal authority and regulation in the area. The constitutional principles in question derive from the Supremacy Clause (preemption and sovereign immunity) and the Commerce Clause of the Constitution.

Judicial decisions interpretive of the preemptive effect of the AEA in the area of nuclear safety, generally, and nuclear transportation, specifically, are discussed. State and local permit and fee requirements are less likely to be legally challenged on AEA preemption grounds than might be the case for other types of state and local nuclear transportation requirements since the matter of nuclear transportation routing, to which they most logically relate, falls primarily within the scope of DOT jurisdiction and regulation. Federal decisions in which state and local permit and fee requirements have been considered are included in this discussion.

Also relevant to the matter under review, the HMTA contains an express provision to the effect that any state or local requirement which is
inconsistent with any HMTA requirement (or implementing regulation) is preempted. HMTA regulations establish the criteria to be employed in making such preemption determinations as well as a mechanism by which an advisory opinion on HMTA statutory preemption, known as an inconsistency ruling, can be obtained from DOT. An inconsistency ruling adverse to a state or locality can, in turn, provide the basis for an application to DOT for a discretionary waiver of preemption under certain statutorily prescribed conditions. This process is discussed more fully below and the DOT inconsistency rulings involving state and local permit and fee requirements are specifically addressed.

In light of the relevant legal principles and process outlined above and discussed below, certain observations and conclusions concerning the legality of state and local permit and fee requirements can be drawn. These are enumerated in the final section of the paper.

B. Relevant Constitutional Principles

Three constitutional principles relevant to an understanding of the federal-state regulatory relationship in the nuclear transportation field are: preemption, sovereign immunity and interstate commerce. The first two concepts derive from the Supremacy Clause and the third from the Commerce Clause of the Constitution.

Under the Supremacy Clause of the Constitution, the laws of the federal government enacted pursuant to constitutional authority are the "supreme law of the land" to the exclusion of any state law that "interfere[s] with" or is "contrary" thereto. (Art. VI, cl. 2). Under the preemption doctrine, federal law precludes state regulation of any area over which Congress has expressly or impliedly exercised exclusive authority. Even in the absence of exclusive federal authority, any state law that conflicts with federal requirements is similarly preempted. State law is thus preempted when compliance with both federal and state regulation is a physical impossibility or where the state law poses an obstacle to the accomplishment of federal objectives.

Under the related doctrine of sovereign immunity, federal entities are immune from state and local taxation and regulatory laws that interfere with federal governmental purposes. State regulation is permissible only if there has been a Congressional waiver of federal immunity. State and local laws that interfere with or pose an undue burden on interstate commerce are similarly prohibited under the Commerce Clause of the Consti-

2. Pacific Gas; Ray, supra note 1.
tution (Art. I, Sec. 8, cl. 3). As a general matter, the validity of a state or local law affecting interstate commerce depends on: (1) whether it is applied in a non-discriminatory manner with only an incidental effect on interstate commerce; (2) whether it serves a legitimate local purpose and, if so; (3) whether alternative means could promote such local purpose as well without discriminating against interstate commerce.\(^4\)

C. **Nuclear Transportation Statutory and Regulatory Scheme**

1. **Nuclear Waste Policy Act (NWPA)**\(^5\)

Implementation of the NWPA will eventually result in large scale Department of Energy (DOE) shipments of nuclear materials to a federal repository required to be operational by the end of the century. The NWPA contains no prescriptive criteria regarding nuclear transportation. Section 9 of the NWPA provides that: """"[n]othing in this chapter shall be construed to affect federal, state or local laws pertaining to transportation of spent nuclear fuel or high-level radioactive waste.""""\(^6\) The NWPA does not alter the preexisting statutory or regulatory framework in the nuclear transportation area.

Section 137 of the NWPA states that DOE spent fuel transportation must be in full compliance with NRC and DOT regulations.\(^7\) This section further provides that DOE take title to nuclear material destined for repository disposal prior to shipment and that private industry be utilized for transportation to the fullest extent possible.

2. **Atomic Energy Act (AEA)**\(^8\)

The AEA, as amended, grants to the NRC the authority to regulate and license the receipt, possession, use and transfer of source, by-product and special nuclear material.\(^9\) NRC nuclear transportation regulation, with the exception of physical security and prenotification requirements during transit, is confined primarily to onsite transportation preparation, such as packaging.\(^10\)

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6. Id. at § 10108.
7. Id. at § 10157. DOT and DOE have entered into a Memorandum of Understanding (MOU) delineating their respective responsibilities in nuclear transportation under the NWPA. 50 Fed. Reg. 47421 (1985). It was agreed that the management of nuclear materials transportation would rest with DOE and conform with all applicable DOT regulations. Id. State and local laws will be assented with if not inconsistent with the HMTA. Id. at 47422.
9. Id. at §§ 2073, 2093, 2011.
10. NRC and DOE have entered into a MOU delineating their respective responsibilities in nuclear transportation under the AEA and HMTA, respectively. 44 Fed. Reg. 38,680 (1979). Under the MOU, the NRC is responsible for the adoption of safety standards for the package.
3. HAZARDOUS MATERIALS TRANSPORTATION ACT (HMTA) 11

The HMTA authorizes DOT to promulgate a comprehensive set of regulations for the safe transport in commerce of hazardous materials, including radioactive materials. The HMTA contains an express provision concerning federal preemption of state and local law. Specifically, section 112(a) preempts "any requirement of the state, or political subdivision thereof, which is inconsistent with any requirement" of the HMTA or implementing regulations (commonly termed Hazardous Materials Regulations (HMRs) and codified at 49 CFR Parts 170-179).

The following two-stage test for determining whether a state requirement is inconsistent is set forth:

(1) whether compliance with both the state or political subdivision requirement and the [HMTA] or the regulation issued under the [HMTA] is possible (dual compliance test); and
(2) the extent to which the state or political subdivision requirement is an obstacle to the accomplishment and execution of the [HMTA] and regulations issued thereunder (obstacle test).12

DOT is authorized to render inconsistency rulings sua sponte or on the request of an outside party.13 This provides a mechanism for obtaining an administrative opinion on statutory or regulatory inconsistency without resort to litigation. An inconsistency ruling is advisory in nature. It is not judicially reviewable or legally enforceable. A court could be expected, nonetheless, to show considerable deference to a DOT inconsistency interpretation should litigation be initiated on the matter.

If a state or local requirement is found by DOT to be inconsistent with the HMTA or implementing regulations under HMTA section 112(a), such a finding provides the basis for application to DOT for a discretionary waiver of preemption under HMTA section 112(b). In this regard, HMTA section 112(b) requires a waiver applicant to demonstrate the following:

(1) that the preempted state or local requirement affords an equal or greater level of protection to the public as compared with the federal standards; and
(2) that it does not unreasonably burden commerce.14

Based on language in the legislative record underlying passage of the HMTA, DOT further requires a waiver applicant to make a threshold show-

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13. Id. at § 107.209(b).
ing of "exceptional circumstances necessitating immediate action to secure more stringent regulations." 15

DOT has rendered over a dozen inconsistency rulings and one non-preemption determination to date. In the procedural requirements governing issuance of non-preemption determinations, 16 DOT has adopted case law criteria 17 for determining whether an inconsistent state or local requirement poses an unreasonable burden on interstate commerce pursuant to HMTA section 112(b)(2). Accordingly, 49 C.F.R. section 107.221(b) provides the following criteria:

(1) the extent to which increased costs and impairment of efficiency result from the state or political subdivision requirement;
(2) whether the state or political subdivision requirement has a rational basis;
(3) whether the state or political subdivision requirement achieves its stated purpose; or
(4) whether there is need for uniformity with regard to the subject concern and, if so, whether the state or political subdivision requirement competes or conflicts with those of other states and political subdivisions.

DOT has promulgated a comprehensive set of regulations (commonly referred to by its rulemaking docket number HM-164) pertaining to highway routing for nuclear material. 18 There are no corollary routing regulations for other transport modes.

HM-164 applies general routing requirements to carriers and shippers of low-level radioactive waste where radioactive levels or quantities require placarding under DOT regulations 19 and specific routing requirements for highway route-controlled quantities of radioactive materials, including spent fuel. 20 This rule is predicated on DOT findings that "the public risks in transporting radioactive materials by highway are too low to justify the unilateral imposition by local governments of bans and other severe restrictions on the highway mode of transportation" and that "other modes of transport generally do not appear to offer alternatives that clearly lower public risks to the extent that use of the highway mode should be substantially restricted." 21 DOT further determined that "the impact of piecemeal state and local restrictions on the transportation of all radioactive materials...signifies a need for nationally consistent routing rules" and that "public safety can be improved through a nationally uni-

19. 49 C.F.R. § 177.825(a) (1986).
20. Id. at § 177.825(b).
form rule that ensures the use of available highway routes that are known to be safe for [highway route-controlled quantities] of radioactive materials.\textsuperscript{22}

Pursuant to 49 C.F.R. Part 177, carriers of highway route-controlled quantities of radioactive materials are required to use "preferred routes," defined as interstate system highways or alternative highway routes designated by the states, with supporting safety analysis, that provide an equal or greater level of safety.\textsuperscript{23}

Accompanying 49 C.F.R. Part 177 is a policy statement appendix which identifies those areas of state and local regulation that DOT deems inconsistent with federal regulation. This appendix provides that a state or local transportation rule is inconsistent with Part 177 if it:

(1) conflicts with [NRC] physical security requirements;
(2) requires additional or special personnel, equipment or escort;
(3) requires additional or different shipping paper entries, placards or other hazard warning devices;
(4) requires filing route plans or other documents containing information specific to individual shipments;
(5) requires prenotification;
(6) requires accident or incident reporting other than that immediately necessary for emergency assistance; or
(7) unnecessarily delays transportation.\textsuperscript{24}

It is further provided therein that any state or local routing rule that significantly restricts or delays highway movement due to the hazardous nature of the cargo and that involves highway route-controlled quantities of radioactive material is inconsistent if it: (1) prohibits transport by highway between two points without providing an alternative route; or (2) is not adopted with a proper safety analysis.\textsuperscript{25}

The term "routing rule" is defined as:

[any action which effectively redirects or otherwise significantly restricts or delays the movement by public highway of motor vehicles containing hazardous materials, and which applies because of the hazardous nature of the cargo. Permits, fees and similar requirements are included if they have such effect. . . .\textsuperscript{26} (emphasis added).

The validity of these DOT routing regulations has been upheld against state challenge.\textsuperscript{27} A similar challenge to the validity of the HM-164 ap-

\textsuperscript{22} Id. at 5,299.
\textsuperscript{23} 49 C.F.R. § 177.825(b) (1986).
\textsuperscript{24} 46 Fed. Reg. supra note 21, at 5,317.
\textsuperscript{25} Id.
\textsuperscript{26} Id.
pendix is pending in a Federal District court in Ohio.  

4. **Federal Railroad Safety Act (FRSA)**  

In addition to the HMTA and AEA, rail transportation is also subject to the FRSA. In terms of the relative preemptive effect of federal railroad safety regulation over state and local requirements, DOT has stated that railroad transport is "more thoroughly imbued [than motor vehicle transport] with a federal interest" so as to render state and local rail routing requirements more susceptible to federal preemption.  

All facets of railroad safety are subject to DOT regulation under the FRSA. The FRSA contains the following preemption provision:

_The Congress declares that laws, rules, regulations, orders, and standards relating to railroad safety shall be nationally uniform to the extent practicable._

A state may adopt or continue in force any law, rule, regulation, order, or standard relating to railroad safety until such time as the Secretary has adopted a rule, regulation, order, or standard covering the subject matter of such state requirement. A state may adopt or continue in force an additional or more stringent law, rule, regulation, order, or standard relating to railroad safety when necessary to eliminate or reduce an essentially local safety hazard, and when not incompatible with any Federal law, rule, regulation, order, or standard, and when not creating an undue burden on interstate commerce.

**D. Judicial Decisions**

1. **AEA**

   A. **General**

State and local nuclear regulation has been generally found preempted under the AEA if its objective is nuclear safety regulation. Although there is no express preemption clause in the AEA, like the HMTA or FRSA, the Supreme Court has found a Congressional intention in passage of the AEA to establish a comprehensive federal regulatory scheme regarding the possession, use, and transfer of nuclear materials and that "[u]pon these subjects, no role was left for the states."  

Section 274 of the AEA authorizes the NRC to enter into agree-

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28. Ohio Ex Rel. Celebrezze v. United States Department of Transp., 776 F.2d 228 (6th Cir. 1985) (reversed and remanded District Court dismissal on standing grounds).
33. Pacific Gas, supra note 1 at 203.
34. 42 U.S.C. § 2021(b), (c)(4) (1982). The Commission still "retain[s] authority and responsibility with respect to the regulation of...[nuclear materials] as
ments with states to transfer certain regulatory authority over limited quantities of nuclear materials under certain conditions. It has generally been held that Congress intended to wholly preclude any state regulation of radiological aspects of nuclear power except when authorized by a state turnover agreement pursuant to AEA section 274.\footnote{Northern States Power Co. v. Minn., 447 F.2d 1143 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972).}

In the case of \textit{Pacific Gas and Electric Co. v. State Energy Resources Conservation and Development Commission},\footnote{Supra note 1.} the Supreme Court held that a California statute conditioning state nuclear power plant construction authorization on the availability of long-term waste disposal was enacted for "avowed economic purpose[s]", rather than safety reasons, and therefore, was "outside the [otherwise NRC] occupied field of nuclear safety regulation" and not preempted thereby.\footnote{Id. at 216.} The Court emphasized that "the federal government maintains complete control of the safety and 'nuclear' aspects of energy generation, the states exercise their traditional statutory authority over the need for additional generating capacity, the type of generating facilities to be licensed, land use, rate making, and the like."\footnote{\textit{Pacific Legal Foundation, supra note 32 (state nuclear plant construction moratorium economically based)}; \textit{see also South Dakota Public Util. Comm'n v. FERC, 690 F.2d 674, 678 (8th Cir. 1982) (state denial of nuclear power plant permit on lack of electricity need, alternative energy, and economic [as distinct from nuclear safety] grounds upheld); United States v. New York City, 463 F. Supp. 604, 614 (S.D.N.Y. 1978) (city nuclear reactor licensing requirement preempted when license pertained to health and safety matters).} In the case of \textit{Northern States Power Co. v. Minnesota},\footnote{447 F.2d 1143 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972).} the Eighth Circuit held that state conditions imposed on a waste disposal permit regulating radiological release levels and monitoring was preempted.

\section*{B. \textit{TRANSPORTATION}}

The case of \textit{Jersey Central Power and Light Co. v. Township of Lacey},\footnote{772 F.2d 1103 (3rd Cir. 1985), cert. denied, --- U.S. ---, 106 S. Ct. 1190 (1986).} involved a challenge to the legality of a local ordinance prohibiting spent fuel shipment. The Third Circuit observed that it is "beyond dispute" that Congress intended "federal law [to] regulate the radiological safety aspects of... nuclear power... including the storage and shipment of spent fuel."\footnote{Id. at 1112.} The court thus found the ordinances in question preempted by the AEA and thereby invalid under the Supremacy Clause. The court alternatively found the ordinances preempted by the HMTA and the Commission determines. ... should, because of the hazards or potential hazards thereof not be so disposed of without a license from the Commission."
implementing regulations in the event Supreme Court review was granted and it disagreed with the court's AEA preemption analysis. 42

Two significant recent federal decisions have interpreted the AEA to preempt state rules prohibiting the transportation and storage within the state of spent fuel generated outside the state. In the first case, Illinois v. G.E., 43 the Seventh Circuit invalidated an Illinois statute along the above lines on the grounds that it was preempted by the pervasive AEA regulatory scheme whose legislative history "compels the conclusion that the [AEA] equally preempts state regulation of the storage and shipment for storage, interstate and intrastate alike, of spent nuclear fuel." 44 The Ninth Circuit found a similar Washington prohibition on low-level radioactive waste storage and transportation violative of the Supremacy Clause "because it [sought] to regulate legitimate federal activity and to avoid the preemption of the AEA" in the case of Washington State Building and Construction Trades Council v. Spellman. 45 Both cases also found the state requirements in contravention of the Commerce Clause.

2. HMTA

A. GENERAL

The primary congressional purpose intended to be achieved through the HMTA was to secure a "general pattern of uniform, national regulations, and thus 'to preclude a multiplicity of state and local regulations and potential for varying as well as conflicting regulations in the area of hazardous materials transportation' ". 46

B. PERMITS AND FEES

The issue of state transportation permitting and fee requirements has received limited judicial scrutiny. In the case of National Tank Truck Carriers, Inc. v. Burke, 47 a state permit system requiring submission of a written application at least four hours prior to state transport was found inconsistent with the HMTA requirement to avoid unnecessary delay in transport.

In the case of New Hampshire Motor Transport Association v. Flynn, 48 a state licensing requirement and associated fee for hazardous materials waste transporters was at issue. The proceeds from the license

42. Id. at 1113.
44. Id. at 215.
45. 684 F.2d 627, 630 (9th Cir. 1982), cert. denied, 461 U.S. 913 (1983).
46. National Tank Truck Carriers, Inc. v. Burke, 608 F.2d 819, 824 (1st Cir. 1979).
47. 698 F.2d 559 (1st Cir. 1983).
48. 751 F.2d 43 (1st Cir. 1984).
fee were to benefit several state programs, including accident response, regulatory enforcement, and hazardous waste cleanup.

The First Circuit concluded that the license-fee system was not violative of the Commerce Clause or inconsistent with the HMTA so as to be preempted thereby.\(^\text{49}\) The court stated that the central question for commerce clause analysis purposes was whether the license fee qualified as a "user fee."\(^\text{50}\) Citing approvingly from the Supreme Court decision in **Evansville-Vanderburgh Airport Authority District v. Delta Airlines, Inc.**,\(^\text{51}\) the court held that states can impose a "reasonable fee to help defray the costs" of state services (users fee) upon "interstate and domestic users alike."\(^\text{52}\)

The court rejected plaintiff’s claim of HMTA preemption. It stated that the transportation delay occasioned by the license requirement was not significant enough to interfere with DOT’s "speedy-transport mandate."\(^\text{53}\) The court pointed out that individual licenses were obtainable during normal business hours and that an annual license could be obtained if shipments were anticipated at other times. Additionally, it cited the DOT statement in IR-3 (see discussion below) that a "bare" license or permit requirement is consistent with the HMTA and considered the New Hampshire system at issue to fall in that category.\(^\text{54}\)

3. **FRSA**

A. **General**

In the case of **National Association of Regulatory Utility Commissions v. Coleman**,\(^\text{55}\) Federal Railroad Administration authority to issue preemptive accident reporting regulations was contested. The Third Circuit concluded that FRSA section 434 evidenced a "total preemptive intent"\(^\text{57}\) and that the legislative history disclosed an "overwhelming expression of congressional intent to preempt state rail safety standards once federal standards have been adopted. . . ."\(^\text{58}\)

The Third Circuit rejected plaintiff’s argument that the FRSA applied only to state substantive safety requirements that were inconsistent with federal regulations, and not to nonsubstantive requirements such as acci-

\(^{49}\) *Id.* at 46.

\(^{50}\) *Id.*

\(^{51}\) 405 U.S. 707 (1972).

\(^{52}\) *Supra* note 48, at 47.

\(^{53}\) *Id.* at 51.

\(^{54}\) *Id.*

\(^{55}\) *Id.* at 50.

\(^{56}\) 542 F.2d 11 (3d Cir. 1976).

\(^{57}\) *Id.* at 13.

\(^{58}\) *Id.* at 14.
dent reporting.\textsuperscript{59} The court further concluded that the state accident reporting requirements did not fall within the "local hazard" exception to federal statutory preemption under FRSA section 434 since the state requirements were "largely duplicative of federal reporting requirements and not directed toward the elimination of any unique, local hazard. . ."\textsuperscript{60} Citing the FRSA legislative history, the court indicated that the "local hazard" exception was "not intended 'to permit a state to establish statewide standards superimposed on national standards covering the same subject matter.'"\textsuperscript{61}

4. \textit{Decisional Summary}

In light of the above judicial precedent, state or local nuclear transportation requirements that fall within the scope of NRC regulatory jurisdiction would probably be preempted under the AEA if grounded on nuclear safety considerations. Courts do not seem disposed to probe beyond an asserted non-safety rationale for a particular state or local requirement if such explanation is reasonable.

While state or local spent fuel transportation prohibitions are clearly proscribed on AEA preemption rounds, state and local nuclear transportation and fee requirements have not been challenged on this basis to date. Invalidation of such requirements on federal preemption rounds would more likely arise under the HMTA than the AEA.

State and local nuclear transportation permit and fee requirements have not been held categorically invalid under the Commerce Clause or preempted under the HMTA. Whether any such requirement is invalid or preempted depends on its purpose and effect with particular regard to the legitimacy of the state basis for such requirement and the inconsistency presented with the uniform and expeditious transportation objectives of the HMTA. FRSA judicial precedent suggests a disposition to give the maximum preemptive effect to federal railroad safety requirements and to circumscribe the scope of the "local hazard" statutory exception thereto. However, the FRSA does not prescribe federal railroad permit or fee requirements, and the legality of state and local railroad permit and fee requirements relative to the FRSA has not been litigated to date.

\textbf{E. Relevant DOT Inconsistency Rulings}

1. \textit{Permits and Fees}

DOT has rendered a number of inconsistency rulings regarding state and local permit and fee requirements. DOT has stressed that, since its

\textsuperscript{59} Id.

\textsuperscript{60} Id. at 14-15.

\textsuperscript{61} Id. at 14 (quotation to legislative authority omitted).
inconsistency proceedings are conducted pursuant to the HMTA, it considers only statutory preemption. It has noted that a federal court could find a non-federal requirement preempted on interstate commerce grounds even if not statutorily preempted. DOT does not make such determinations.62

IR-2 concerned the validity of certain Rhode Island regulations concerning motor vehicle transport of liquefied propane gas and natural gas, including a permit requirement for such operation.63 The relevant Rhode Island rule required receipt of a state permit prior to each movement to be obtained by written application no less than four hours or more than two weeks prior to transportation. DOT found this permit requirement inconsistent with the HMRs and therefore, preempted. It reasoned that the permitting process carried the high probability of transport delay and that any state or local rule that sought "an additional piece of paper that supplies the same information as is required to be on the DOT shipping paper" is patently inconsistent with HMTA regulations.64 DOT noted, however, that "a permit may serve several legitimate state police power purposes, and the bare requirement. . .that a permit be applied for and obtained is not inconsistent with the federal requirements."65 At the same time, DOT cautioned that a permit is "inextricably tied" to the requirements for its receipt and its permissibility so evaluated.66 IR-2 was upheld on judicial review.67

IR-3 involved a city regulation restricting certain hazardous materials transportation within Boston, including a permit requirement for transportation outside a specified city area.68 In light of the ill-defined permit conditions and scope, DOT concluded that their consistency with HMTA requirements was indeterminable.69 DOT restated its opinion in IR-2 that a "bare" permit requirement is not necessarily inconsistent with the HMTA.70

In 1984, DOT issued several consolidated rulings (IR-7 through IR-15) upon application by the Nuclear Assurance Council respecting several state and local transportation restrictions.71 In these rulings, DOT articulated criteria for determining permissible state and local permits.

64. Id. at 75,571.
65. Id. at 75,570.
66. Id.
67. Supra note 47.
69. 46 Fed. Reg. at 18,923; see also 47 Fed. Reg. at 18,457.
70. 46 Fed. Reg. at 18,923.
IR-8 involved a Michigan permit requirement that required, among other things, the submission of a written application by radioactive materials carriers at least 15 days in advance of the scheduled in-state shipment. The application contents included the proposed truck route and a written emergency plan. Prior written approval for shipment was required subject to any conditions or limitations deemed necessary. Michigan contended that the permitting system was a permissible exercise of its public safety power and that radioactive materials transportation posed a greater risk in Michigan than in other states. It, therefore, ostensibly had a corresponding duty to protect its citizens. DOT rejected this argument and concluded that federal regulation of radioactive materials transportation safety pursuant to the HMTA and implementing regulations was so thorough and pervasive that it effectively precluded any such state and local requirements. DOT stated:

Generally, in the absence of departmental involvement in a safety issue, states can, and, to the extent authorized by state law, local governments may regulate to protect the public safety. Where, as here, the issue has been thoroughly addressed through rulemaking, the state role is much more circumscribed. The HMR addresses all aspects of radioactive materials transportation. Increasingly stringent requirements are imposed on the basis of increasing nuclear risk. Under the authority of the HMTA, federal regulation of radioactive materials transportation safety has been so detailed and so pervasive as to preclude independent state or local action. The extent to which state and local government may regulate the interstate transportation of radioactive materials is limited to:

(1) traffic control or emergency restrictions which affect all transportation without regard to cargo;
(2) designation of alternate preferred routes in accordance with 49 C.F.R. 177.825;
(3) adoption of federal regulations or consistent state/local regulations;
(4) enforcement of consistent regulations or those for which a waiver of preemption has been granted pursuant to 49 C.F.R. 107.221. Thus, in the absence of an express waiver of preemption, no authority exists, for state of [sic] local government to impose a permit requirement on shipments of radioactive materials which applies because of the hazardous nature of the cargo.72

DOT stated that a state requirement that operators obtain a permit when they intend to transport loads that exceed certain size or weight limits, irrespective of the nature of the cargo, was an example of an acceptable permit requirement adopted pursuant to state police power. The Michigan permit was not such a case and was found inconsistent with the HMTA and implementing regulations. Michigan has filed an administrative appeal to the ruling.

72. id. at 46,643.
A similar state permit system in Vermont was ruled inconsistent with federal law in IR-15. DOT found that this constituted a routing rule in the form of a permit. Vermont has filed an administrative appeal to this ruling. It had imposed a permit fee upon the shipment of highway route-controlled material. The fee was imposed to reimburse the state for the expense of providing state escorts and emergency response. DOT found that spent fuel shipment posed an historically lower risk of transportation accident necessitating emergency response than other hazardous materials, and that the permit fee was hence discriminatory in its selective application.

DOT observed that spent fuel transportation in Vermont posed no unique safety risk and it was only its "limited capacity for emergency response which is alleged to be unique." DOT, however, found this circumstance resulted from the state's decision to assemble an independent response team rather than rely on available federal resources in this area. It also found Vermont's transport approval fee had the direct effect of redirecting shipments away from Vermont whenever possible. The foreseeable indirect effect was to encourage other states to take similar action which "would amount to a system of internal tariff barriers which would completely undermine HM-164 by forcing transporters to select routes on the commercial basis of reduced cost rather than the safety basis of reduced time in transit." In view of these impacts, DOT concluded that the Vermont fee presented an "obstacle to the accomplishment and execution" of the HMTA as implemented by HM-164 and was therefore inconsistent.

IR-11 involved a local rule prohibiting highway transportation of radioactive materials without a permit. DOT found that this constituted a routing rule in the form of a permit requirement. It reasoned: "If the [local authority] could impose such restrictions on the availability of highway routes to vehicles engaged in the transportation of radioactive materials, then any political subdivision of the state could do so...[T]he proliferation of independently enacted restrictions would lead to the type of regulatory balkanization which Congress sought to preclude by enacting the HMTA..."

Local transportation permit requirements were also deemed to con-
stitute inconsistent routing rules in IR-12\textsuperscript{81} and IR-13.\textsuperscript{82} Under the same rationale espoused in IR-8, DOT noted that "radioactive materials routing rules in the form of shipment-specific permit requirements were... inconsistent per se."\textsuperscript{83}

Another DOT inconsistency ruling on the subject (IR-17) was rendered on June 4, 1986.\textsuperscript{84} IR-17 involved an Illinois fee on spent fuel transportation to finance a state transportation emergency preparedness program. The ruling had been requested by the Wisconsin Electric Power Company (WEPCO). DOT concluded that the fee was not inconsistent with, nor preempted by, the HMTA and implementing regulations. WEPCO contended that the transport fee was a prohibited routing rule under HMTA and inconsistent therewith. WEPCO cited the DOT policy statement on inconsistency in Appendix A to 40 C.F.R. Part 177, which provides that a transit fee constitutes a "routing rule" if it "effectively redirects or otherwise significantly restricts or delays the movement of public highway of motor vehicles containing [spent fuel] and applies because of the hazardous nature of the cargo." DOT ruled that the Illinois transport fee was not a prohibited routing rule on the grounds that it did not significantly restrict the transport of spent fuel in Illinois, redirect shipments away from preferred routes, or significantly delay spent fuel shipments.

In its challenge, WEPCO cited approvingly from IR-15 involving the Vermont spent fuel transport fee. DOT distinguished the Vermont and Illinois fee requirements on the grounds that the latter did not require advance state transit approval, did not deny entry to any shipment for failure to pay the required fee in advance, and did not purport to deny entry to any shipment in compliance with DOT standards. It noted that shipments had been diverted as a result of Vermont's transport approval fee and, to date, no shipment had been similarly delayed or denied entry into Illinois for non-payment of the fee.

DOT found that the nature of spent fuel transportation was such that there was adequate time between identification of a shipment and start of transportation to enable transporters to pay the requisite fee prior to movement of a shipment in Illinois. This militated against a finding of a potential of delay.

DOT likened the situation to that which it found prevalent in Flynn,\textsuperscript{85} where, despite the fact that the transport license at issue there could only be obtained during ordinary business hours, carriers anticipating evening or weekend shipments could obtain the annual license and thereby avoid

\textsuperscript{81.} Id. at 46,650.
\textsuperscript{82.} Id. at 46,653.
\textsuperscript{83.} Id. at 46,652.
\textsuperscript{84.} 51 Fed. Reg. 20,926 (1986).
\textsuperscript{85.} Supra note 48.
the potential for delay. DOT did not rely on the primary holding in Flynn to the effect that the license fee therein was a valid "user fee" under the Commerce Clause of the Constitution since interpretations of that constitutional provision are beyond the scope of the inconsistency ruling process.

DOT further ruled that the regulatory program, of which the transit fee is a part, was itself not inconsistent with the HMTA. It explained that transportation emergency preparedness is not the sole province of any single level of government, that governmental entities may statutorily require payment for the provision of governmental services, and that Illinois has by statute created an emergency preparedness program which coordinates federal, state, and local responsibilities and properly provides for financing of related state and local expenditures through means of the transit fee.

Finally, DOT found that the potential for encouragement of a multiplicity of similar transit fees in other jurisdictions was not the type of prospect that would lead to an inconsistency finding under the HMTA. In this regard, DOT stated that, while DOT may require transporters to maintain such strict compliance with federal transportation regulations that few additional requirements could withstand the HMTA regulatory inconsistency standards, such regulations would have to serve a legitimate safety purpose. DOT noted that it has no current regulation that preempts state fees per se. An appeal from IR-17 filed by WEPCO, a nuclear utility transportation group, and DOE is pending.

In recent developments, DOT has elicited public comment on an inconsistency ruling application (IRA-39) submitted by the Southern Pacific Transportation Company regarding Nevada Public Service Commission (NPSC) permit and fee regulations. The regulations in question require railroads to obtain permits before they may load or unload certain hazardous (including radioactive) materials on railroad property, transfer defined materials from railroad property to another means of transportation, and store defined materials on railroad property. The regulatory provisions contain permit application requirements, application evaluation criteria, permit expiration and renewal procedures, suspension or revocation criteria and notice procedures. The application requirements include the provision of proposed loading, unloading, storage or transfer location maps, operational procedures, track inspection reports, a track construction summary, a summary of previously carried hazardous materials, a summary of unintended past material releases, sabotage prevention procedures, and accident plans. A permit is issued for one year, carries a $200 fee, and is renewable subject to certain specified findings. The

Southern Pacific Transportation Company contends that the Nevada provisions are inconsistent for five reasons:

1. They require different treatment and handling of certain commodities because of their DOT classifications as hazardous materials.
2. They require the preparation of lengthy, cumbersome permit applications, replete with irrelevant and extraneous detail, before the defined hazardous materials may be loaded, unloaded, transferred, stored or temporarily held in transit.
3. They involve extensive delays and require hazardous materials to be held in other states pending admission into Nevada.
4. The required application information goes far beyond that required on DOT papers.
5. Permit processing delays result in the [NPSC] having uncontrolled discretion over the transportation of hazardous materials in Nevada.87

On January 2, 1987, DOT issued an inconsistency ruling (IR-18) which found certain permit requirements promulgated by Prince George's County, Maryland inconsistent with the HMTA and implementing regulations.88 The ruling had been sought by the county. The permit provisions in question included several advance notification and informational requirements regarding shipment date and time, starting point, route, stops destination, and other "reasonably related" information requested by the county. A showing was also required that containers, packaging, labeling, operation and equipment were in conformance with relevant federal or county regulations.89

Citing past inconsistency rulings, DOT found that these particular provisions exceeded federal requirements, created an additional burden or delay and were, consequently, inconsistent with HMTA and related regulations.90 DOT found further that the required notification information violated the prohibition (in 10 C.F.R. section 73.21 and 49 C.F.R. section 173.22(c)) against disclosure to non-law enforcement local authorities of schedules and itineraries for specified radioactive shipments and thereby failed the "dual compliance" test and were inconsistent.91 DOT found that the balance of the information requirements constituted an impermissible local packaging requirement and noted that state and local governments may not issue different or additional packaging requirements.92

The permit process took three business days, permitted the county to change transport dates, routes and times, precluded transport absent a finding that an adequate emergency response capability was present "in
a manner necessary to protect public health and safety," and contained
discretionary escort requirements.\textsuperscript{93} DOT found that the three-day
processing time period was inconsistent with the 49 C.F.R. Part 177, Ap-
pendix A policy statement provisions against unnecessary transportation
delays.\textsuperscript{94} The provisions authorizing date, route and time changes and
the "vague" transport prohibition absent an emergency response ade-
quacy finding were similarly found to be in conflict with the federal regul-
atory scheme, an obstacle to the achievement of the HMTA and
inconsistent. On the matter of emergency response, DOT further stated
that the county could neither shift its own responsibilities to carriers nor
hold carriers "hostage" to a case-by-case county determination of emer-
gency response adequacy.\textsuperscript{95}

Finally, DOT found that the "open-ended" authority to require escorts
is a prohibited obstacle to transportation, exceeded NRC's escort provi-
sions and was to be inconsistent with the HMTA and regulations.\textsuperscript{96} It
noted that state or local escort requirements which were identical to or
"facilitated" NRC escort requirements were consistent.\textsuperscript{97}

A. TAX IMMUNITY

The Supremacy Clause prohibits states from taxing the federal gov-
ernment directly.\textsuperscript{98} A valid argument can be made that any fee assess-
ment against a federal agency nuclear materials owner (such as DOE
pursuant to its NWPA responsibilities) would be the functional equivalent
of a proscribed state tax on the federal government. The validity of a fee
assessment against a private carrier with whom the federal agency might
contract to transport nuclear material is less clear. Government contrac-
tors are not categorically considered federal instrumentalities for pur-
poses of tax immunity.

In the case of Washington v. United States,\textsuperscript{99} the Supreme Court
ruled that a Washington state taxing scheme, which imposed a sales tax
for construction materials on a private landowner but imposed the tax for
construction materials on the contractor in the case of federal government
land ownership, was not invalid. The Court held that the federal govern-
ment's constitutional immunity from state taxation may not be conferred
on a third party simply because the tax has an effect on the United States,
or even if the federal government bears the economic burden of the as-

\textsuperscript{93} Id.
\textsuperscript{94} Id.
\textsuperscript{95} Id.
\textsuperscript{96} Id.
\textsuperscript{97} Id.
\textsuperscript{98} United States v. New Mexico, 455 U.S. 720 (1982); McCulloch v. Maryland, supra note
3, at 436.
essment. Quoting its opinion in *United States v. County of Fresno*, the Court reasoned: "so long as the tax is not directly laid on the federal government, it is valid if nondiscriminatory. . . or until Congress declares otherwise." At the same time, the Court observed that "[a] state cannot single out the federal government and those with whom it deals for special tax." In the case of *United States v. New Mexico*, the Supreme Court held that contractors having contracts with the federal government to manage certain government-owned atomic laboratories in New Mexico were not "constituent parts" of the federal government, and the imposition of a state tax upon property purchased by them under that contract was not violative of the federal immunity from state taxation. At issue in the case was a New Mexico sales tax on goods and services (gross receipts tax) and a compensating use tax on property acquired out-of-state in a transaction that would have been subject to the gross receipts tax if it had occurred within the state.

In arriving at its holding in the case, the Court stated that federal tax immunity is only appropriate "when the levy falls directly on the United States itself or on an agency or instrumentality so closely connected to the Government that the two cannot realistically be viewed as separate entities, at least insofar as the activity being taxed is concerned." The Court continued: "[a] finding of constitutional tax immunity requires something more than the invocation of traditional agency notions: to resist the state's taxing power, a private taxpayer must actually 'stand in the Government's shoes.' "

The Court further observed that "immunity cannot be conferred simply because the state tax falls in the earnings of a contractor providing services to the government" or "simply because the tax is paid with government funds." In applying these principles to the circumstances at issue, the Court questioned "whether the contractors can realistically be considered entities independent of the United States. If so, a tax on them cannot be viewed as a tax on the United States itself."

Regarding the property use tax, the Court deemed its decision in *United States v. Boyd* controlling. The *Boyd* case involved Atomic En-

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100. 429 U.S. 452 (1976).
101. Supra note 99, at 540.
102. Id. at 541.
103. Supra note 98.
104. Id. at 735.
105. Id. at 737 (citation omitted).
106. Id. at 734.
107. Id. at 735.
108. Id. at 738.
ergy Commission (now NRC) contractors performing nuclear reactor maintenance and construction work under the general direction of the government. They purchased goods and materials using government funds, but retained no ownership interest in the same.

The Court in *New Mexico* noted that it had upheld the state property use tax at issue in *Boyd* reasoning that "'[t]he vital thing is that [the contractors are] 'using the property in connection with [their] own commercial activities.'"\(^{110}\) The Court continued: "That the federal property was being used for the Government's benefit...was irrelevant, for the contractors remained distinct entities pursuing 'private ends,' and their actions remained 'commercial activities carried on for profit.'"\(^{111}\) The *Boyd* contractors were held not to be instrumentalities of the United States.

The Court in *New Mexico* noted that the contractors before it were "'privately owned corporations' in which government officials had no "'day-to-day operation [at] all'" role nor any "'ownership interest.'"\(^{112}\) The Court contrasted the contractor personnel with federal employees, terming the differences between the two "'crucial'."\(^{113}\) It stated: "'The congruence of professional interests between the contractors and the federal government is not complete; their relationships with the government have been created for limited and carefully defined purposes.'"\(^{114}\) The Court, therefore, concluded that the imposition of a state tax on such entities did not contravene federal supremacy concepts. In *dictum*, the Court suggested that a state tax on contractors would also be constitutionally barred if it "'substantially interfered with [federal government] activities.'"\(^{115}\)

Applying the above authorities to the issue of transportation permit fees, it is probably reasonable to conclude that a private nuclear transportation contractor would not be immune from state tax (fee) on activities within their scope of effort notwithstanding their federal contractor status unless such tax (fee) was imposed discriminatorily upon federal activities. A valid argument can probably be made that such a fee is impermissible if its purpose or effect would be substantially to interfere with federal agency statutory responsibilities.

\(^{110}\) Supra note 98, at 739 (citation omitted).

\(^{111}\) Id.

\(^{112}\) Id. at 740.

\(^{113}\) Id.

\(^{114}\) Id. at 740-741.

\(^{115}\) Id. at 736; see also Detroit v. Murray, 355 U.S. 489, 495 (1958) ("'[t]here was no crippling obstruction of any of the Government's functions, no sinister effect to hamstring its power, not even the slightest interference with its property ").
F. CONCLUSION

In light of the foregoing, the following general observations and conclusions can be drawn:

1. State and local transportation permit and fee requirements may or may not be preempted under the AEA, depending on their objective. If the requirement is based on nuclear safety concerns, it will be preempted by the AEA. If not, preemption may not be present.

2. State and local transportation permit and fee requirements could pose an undue burden on interstate commerce and therefore, contravene the Commerce Clause of the Constitution. The extent of the interstate commercial impediment posed by such requirements would be balanced by a reviewing court against any state and local purpose that were intended.

3. A federal agency could decline to abide by state and local permit and fee requirements imposed directly upon it (as nuclear materials owner) on sovereign immunity grounds. The federal agency could take the position that compliance with such requirements would seriously interfere with its statutory responsibilities. If such requirements are imposed on a private transportation government contractor, rather than a federal agency, such immunity would probably not be found unless imposition of the requirement would substantially interfere with the contracting agency’s statutory responsibilities.

4. The HMTA could foreclose state and local permit and fee requirements. Some court decisions accord more latitude to state and local regulation in this regard than DOT’s inconsistency rulings. While each such requirement must be evaluated on an individual basis, DOT’s inconsistency rulings have generally found each state rule considered to be inconsistent with, and preempted by, the HMTA and implementing regulations. DOT has generally determined that such requirements constitute “routing rules” within the meaning of HM-164 and that, depending on their terms, they have an impermissible and adverse effect on nuclear waste transportation, including, among other things, undue delay and incentive to reroute transportation to non-permit and fee states.
The Hazardous Materials Transportation Act: Chemicals at Uncertain Crossroads

STUART C. THOMPSON

I. INTRODUCTION

Advances in applied chemistry have unquestionably benefitted modern society, although recurring episodes of chemical mishap reveal hidden side-effects to both human health and the environment fostered by these developments. In large part, public chemophobia has focused on the dilemmas posed by chronic toxic wastes, which emerge from their inadequate confines to antagonize unwary communities.1 However, an industrial catastrophe during 1984 in Bhopal, India has awakened anxiety over more sudden chemical disasters.2 As a result, social concern is gathering more over a transient peril to public safety in the transportation of hazardous materials.3

Commodities possessing dangerous characteristics are indisputably significant to the economy, and, while an estimated 250,000 chemical shipments are made safely throughout the United States on a daily basis,4

3. The public has become aware of what the chemical industry, the shippers, and the federal government have known for a long time: millions of tons of hazardous chemicals travel throughout the U.S. each year carrying with them the potential for truly catastrophic disasters. Chemical & Environmental News, Nov. 24, 1980 at 20.
4. Time, supra, note at 35.
mishaps are inevitable.\textsuperscript{5} As a result, citizens are becoming less tolerant of the toxic traffic rumbling through their towns and competing for space on their highways. With ebbing confidence, the public is peering past the innocuous appearance of trucks and trains hauling chemical cargoes to perceive them as rolling bombs.\textsuperscript{6}

Congress addressed the increasing challenge presented by dangerous commodities in transit by enacting the Hazardous Materials Transportation Act of 1974 (HMTA).\textsuperscript{7} Through the HMTA, the federal government exercises an overshadowing, though not exclusive, role in this area; however, in spite of their efforts, government action has been less than successful. As states and lesser jurisdictions continue to realize the inadequacy of the federal scheme to meet their needs, they become more proactive, enacting laws and regulations to shield their constituents from the ills perceived in hazardous materials transportation.\textsuperscript{8} The issue further is joined by industry, which contends unilateral local efforts place on onerous burden on commerce, often in conflict with the Constitution and federal statutory law.\textsuperscript{9}

This article analyzes the legal ramifications of hazardous materials transportation, particularly via highway,\textsuperscript{10} illustrating the uncertain interplay of state and federal powers embossed throughout various hazardous


\textsuperscript{6} As in the case of a train derailment during early July 1986, involving a tank car of phosphorus, forcing the evacuation of 47,000 residents of Miamisburg, Ohio. Newsweek, July 21, 1986, at 19. Yet, apprehension is not peculiar to the United States. A British publication recently reported:

Unscrupulous tanker operators are ignoring chemical transport regulations and increasing the danger of a major hazardous goods accident on Britain’s roads. Truck, Jan. 1986, at 38.


\textsuperscript{8} Leonard R. Lenihan, an Erie County, New York legislator, recently observed that his district is a high-risk area for hazardous materials accidents, adding that “... on any day, Erie County is potentially threatened with a truck or railroad accident involving a variety of hazardous materials such as PCBs, corrosive chemicals or explosives.” Kenmore (N.Y.) Record-Advertiser, June 11, 1986, at 9.

\textsuperscript{9} “These jurisdictions are very well-intentioned,” comments Andrew Doyle, counsel for the National Paint & Coatings Assn. (NPCA). “They see there’s a problem out there and a danger inherently involved in moving flammable, combustible, and poisonous types of materials. But instead of working with the federal government, they often work against it by promoting different or conflicting regulations.” Handling & Shipping Management, April 1985, at 64.

\textsuperscript{10} Highway transportation leads all modes in numbers of hazardous materials related incidents and casualties. 1983 Annual Report, at 15.
materials transportation decisions. While the discussion naturally centers on constitutional and statutory implications, it also addresses the relationship between constitutional and statutory rules and the evolving common law of hazardous materials transportation.

II. THE HAZARDOUS MATERIALS TRANSPORTATION ACT OF 1974

The Hazardous Materials Transportation Act\(^{11}\) is the basic federal safety net for hazardous materials in transit. It vests broad power in the Secretary of Transportation to adopt such measures he or she deems proper to secure protection from hazardous materials. Specially, Section 104\(^{12}\) of the Act accords the Secretary authority to designate materials, which, by nature of their quantity and form, are hazardous to public health and safety. Under Section 105\(^{13}\) and 106, the Secretary may adopt regulations covering all aspects of the safe transportation and handling of these materials by all modes, including packaging, labeling, marking, and routing. Section 110\(^{14}\) provides for civil penalties of up to $10,000 per violation, and criminal penalties of up to $25,000 and five years imprisonment for willful violation of the statute or its regulations.

Legislative history of the HMTA reflects a congressional concern that the fragmented state of federal hazardous materials law prior to the Act failed to address many risks critical to safe movement of these goods.\(^{15}\) A primary motivation in passage was to close this gap by charging a single federal agency with overseeing hazardous materials safety, thereby to:\(^{16}\)

\[\ldots\text{preclude a multiplicity of state and local regulations and the potential for varying as well as conflicting regulations in the area of hazardous materials transportation.}\]

The purpose of the HMTA is set forth in Section 102, which states:\(^{17}\)

It is declared to be the policy of Congress in this title to improve the regulatory and enforcement authority of the Secretary of Transportation to protect the Nation adequately against the risks to life and property which are inherent in the transportation of hazardous materials in commerce.

The essential duality of purpose—protecting the nation through uniform standards—is not without judicial support.\(^{18}\) Yet, this goal has also been bifurcated. \textit{City of New York v. Ritter Transp., Inc.}\(^{19}\) upheld a local ordinance which imposed stringent restrictions on certain tank trucks trav-

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16. \textit{id}. at 37.
ersing New York City. The District Court upheld the provision, finding the "underlying" intent of the HMTA to:  

20. ... ensure protection against the risks to life and property which are inherent in the transportation of hazardous materials," reasoning that state regulations must be examined in order to determine whether they conflict with the "full purposes and objectives of Congress."  

21. However, in abbreviating the uniformity inherent with the HMTA, Ritter promotes a hodgepodge of dichotomous state and local regulations, entirely contradictory to the clear intent of Congress.

III. EXPECTATIONS OF SAFETY UNDER THE HMTA

An important inquiry into the HMTA regards the degree of safety it provides the public. The Act obliges the Secretary of Transportation to promulgate regulations which "adequately" protect the public.  

22. The Secretary has chosen to satisfy this mandate through an exhaustive regulatory scheme, covering substantially all aspects of hazardous materials transportation.

23. While comprehensive, the HMTA does not presume to eradicate the risks inherent in hazardous materials transportation. Rather than attempting to maximize safety, Congress expected the Secretary to exercise discretion in balancing the competing interests of absolute safety and economic efficiency.

24. Thus, in Akron, Canton, & Youngstown R.R. Co. v. I.C.C.,  

25. the Sixth Circuit affirmed an Interstate Commerce Commission (ICC) order requiring petitioner railroads to accommodate shipments of radioactive materials. Although the rail carriers asserted carriage of nuclear goods was too dangerous, the Court held they could not refuse items comporting in all respects to federal safety regulations.

26. Similarly, in Consolidated Rail Corp. v. I.C.C.  

27. certain railroads sought to overturn an ICC denial to grant special tariffs for unique precautionary measures they had implemented for transporting radioactive materials. The Commission found such unilateral steps to be unneces-
sary, and, upon review, the Court agreed. While the railroads laudably desired to reduce the potential for radiation mishaps, their efforts were superfluous in light of the extensive transportation safety regulations already in place to minimize such risks and would impress exorbitant costs on shippers of these materials.

IV. PREEMPTION OF STATE HAZARDOUS MATERIALS LAW

Article VI of the U.S. Constitution has frequently been applied to displace state law which intrudes into areas exclusively occupied by the federal government. In matters in which state governance is not totally divested, the Supremacy Clause has also been employed to invalidate state legislation conflicting with duly enacted federal law.

In this latter category, the Supreme Court has found state law to be preempted when either a direct conflict between federal and state measures makes compliance with both a physical impossibility, or in the absence of such conflict, when the state law stands as "an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."

The HMTA is not so pervasive as to entirely withdraw hazardous materials from the reach of state and local law. Permitting a degree of state regulation, Section 112(a) preempts state requirements which are "consistent."

Section 112(b) provides an administrative means whereby the Secretary may nonetheless exempt state regulations which have been found to be inconsistent under Section 112(a). An administrative override of inconsistency under this section must include separate determinations.

27. U.S. Const., art. VI, cl. 2.
33. 49 U.S.C. § 1811(a) (1976) provides:
   Except as provided in subsection (b) of this section, any requirement, of a State or political subdivision thereof, which is inconsistent with any requirement set forth in this chapter, or in a regulation issued under this chapter, is preempted.
34. 49 U.S.C. § 1811(b) provides, in pertinent part:
   Any requirement, of a State or political subdivision thereof, which is not consistent with any requirement set forth in this chapter, or in a regulation issued under this chapter, is not preempted if, upon the application of an appropriate State agency, the Secretary determines, in accordance with procedures to be prescribed by regulation, that such requirement (1) affords an equal or greater level of protection to the public than is afforded by the requirements of this chapter or of regulations issued under this chapter and (2) does not unreasonably burden commerce.
that the protection afforded the public is "equal [to] or greater [than]" to that provided by the HMTA, and that the state measure "does not unreasonably burden commerce." As a result, the HMTA gives effect to all consistent, and those inconsistent, but specially exempted, state and local hazardous materials laws.

While the drafters failed to supply a statutory definition of inconsistency, the explicit direction to the Secretary to implement a comprehensive federal scheme provides "strong support" that Congress intended the HMTA to embody a rule of state preemption significantly stricter than espoused in Supreme Court interpretations of the Supremacy Clause.

V. PREEMPTION AND PRIMARY JURISDICTION

Section 112(b) explicitly accords the Secretary sole original jurisdiction for exempting inconsistent state and local regulations. Yet, this exclusivity of forum was not drafted into Section 112(a) inconsistency proceedings. This statutory silence suggests a congressional intent to have either the courts or the Secretary make determinations of inconsistency.

Where courts and executive agencies concurrently share jurisdiction over a subject, uncertainty can arise respecting the entity having precedence to hear a particular controversy. In such an instance, juxtaposition of power may foster rivalry and create an undesirable conflict between the actions of the agency and a decision of the courts. The need to coordinate overlapping jurisdictional authority has prompted courts to apply the doctrine of primary jurisdiction. Where consistency and uniformity are expedient, a court, not having the benefit of an agency's posture through a full record of its views, may defer to the agency as a resource in sensibly resolving a controversy.

Primary jurisdiction is not jurisdictional per se, in that invocation of the doctrine does not cede original judicial power to hear a particular matter. While not abrogating original jurisdiction, a court may elect to re-

35. Id.
37. 49 U.S.C. § 1811(b).
38. 49 U.S.C. § 1811(a).
43. See Botein, Primary Jurisdiction: The Need For Better Court/Agency Interaction, 29 Rutgers L. Rev. 867 (1976).
frain from its exercise in matters raising "issues of fact not within the
canventional experience of judges or cases requiring the exercise of judi-
cial discretion."44 Where not called upon to resolve factual issues within
an adversarial context, courts have recognized an inability through their
canventional means to frame relief suited to shaping broad administrative
policy.

In Kappelman v. Delta Air Lines, Inc.,45 an airline traveler, prompted
by accidental exposure to radioactive cargo during a flight, sued to enjoin
Delta from transporting radioactive materials in its aircraft without first pro-
viding specific warning to boarding passengers. While alleging neither
violation of the HMTA nor specific injury, plaintiff nevertheless maintained
such carriage constituted a nuisance to the traveling public.

The Court applied a "doctrine in the nature of primary jurisdiction"46
to affirm dismissal of the complaint and decline exercise of jurisdiction
which, in effect, invited it to promulgate regulations by injunction:

The injunction which appellants would have the court fashion here would in
effect constitute a regulation covering one phase of the interstate transpor-
tation of one group of hazardous materials on one airline. Such determina-
tions are better made on an industry-wide basis in any agency rulemaking
proceeding, and this indeed is the choice which Congress made in enacting
the Hazardous Materials Transportation Act.47

Numerous factors militate for and against the application of primary
jurisdiction to hazardous materials transportation. For example, courts
may see little advantage in holding judicial proceedings in abeyance, as
first applying the views of the Department of Transportation to a novel set
of facts may entail protracted notice and comment procedures, eventually
culminating in a formal agency inconsistency ruling.48 Yet, it is this very
character which permits the Department to thoroughly research ques-
tions, employing the use of public comments, public hearings, docu-
mented risk studies, and past accident experience to develop an
informed decision.49

On the other hand, a court may decline exercise of original jurisdic-
tion, in favor of the Department, in the knowledge that a party may there-
after seek to have the agency final decision set aside. A final order issued
by Department of Transportation is subject to appeal, and a court may

1061, 97 S. Ct. 784, 50 L.Ed.2d 776 (1977).
46. Id. at 169.
47. Id. at 172.
48. Regulations have been promulgated, at 49 C.F.R. § 107.201-211 (1985), providing for
administrative procedures for issuing agency inconsistency rulings.
49. For an exhaustive example, see U.S. Dept. of Transp., Docket No. HM-164, 46 Fed.
Reg. 5298 (January 19, 1981) at 5299 (codified at 49 C.F.R. Sections 171-173, 177 (1985)).
choose to conserve judicial resources for possible review.\textsuperscript{50} As a matter of policy, however, the Department of Transportation is reluctant to issue inconsistency rulings, putting itself in a position adversarial to jurisdictions with which the agency seeks cooperation.\textsuperscript{51} There are also legal limitations inherent in this approach. Department inconsistency rulings consider only statutory preemption, failing to examine questions of constitutionality.\textsuperscript{52} Additionally, pursuant to Section 553 of the Administrative Procedures Act,\textsuperscript{53} a court is limited to reviewing the substantive reasonableness of agency final rulings.\textsuperscript{54}

VI. COMMERCE CLAUSE BASES FOR HAZARDOUS MATERIALS REGULATION

Being articles of trade, hazardous materials fall within the plenary power accorded Congress under the Constitution to regulate interstate commerce.\textsuperscript{55} As opposed to merely functioning as an economic dynamic, the Commerce Clause has increasingly assumed a federal environmental and safety character, becoming a primary tool for sustaining legislation such as the HMTA.\textsuperscript{56}

The constitutional underpinnings of hazardous materials transportation also support a degree of state regulation. Under the power reserved them by the 10th Amendment, states may regulate matters of health and public safety, despite some impact upon interstate commerce.\textsuperscript{57} Protection against accidents upon public highways is a valid subject of the residual state police power.\textsuperscript{58} States enjoy a well-established interest in the safe operation of their highway systems, and non-discriminatory laws

\textsuperscript{50} Using the courts as a super agency to effect environmental policy has, in a similar context, been criticized as "an attempt to ask a court under the guise of a common law nuisance doctrine to establish pollution standards in an area which is already subject to federal, state and local regulations... such matters are best handled by regulatory agencies." City of Chicago v. Commonwealth Edison Co., 24 Ill. App.3d 624, 321 N.E.2d 412 (1974).

\textsuperscript{51} Inconsistency rulings by the Department, however, have the effect of contributing to an adversarial, confrontational relationship with regional entities and militate against the creation of a nationwide, consistent hazardous materials transportation policy.


\textsuperscript{53} 5 U.S.C. § 553 governs Department inconsistency rulings under 49 C.F.R. Part 107, Subpart C.

\textsuperscript{54} Independent Meat Packers Ass'n v. Butz, 526 F.2d 228 (8th Cir. 1975), cert. denied 424 U.S. 966, 96 S. Ct. 1461, 47 L.Ed.2d 733 (8th Cir. 1975).

\textsuperscript{55} U.S. Const., Art. I, § 8, cl. 3.

\textsuperscript{56} See State Environmental Protection Legislation and the Commerce Clause, 87 Harv. L. Rev. 1762 (1974).


touching upon this interest are accorded special deference. However, there are instances where this traditional deference in unwarranted. Foremost of these measures are passed off as promoting public welfare, but are truly aimed at protecting the economic interests of the particular state.

Thus, in *Philadelphia v. New Jersey*, the Supreme Court struck down a state requirement forbidding importation of hazardous wastes. While articulating health and environmental reasons for excluding out-of-state wastes, New Jersey kept its landfills open to domestic waste. Ostensibly banning unsafe goods, New Jersey subjectively excluded wastes on the basis of their origin, not out of any innate toxic harmfulness. Discriminating against foreign wastes was not a valid legislative means for New Jersey to reserve domestic landfill capacity for its own consumption.

*Philadelphia* has application to the broader spectrum of hazardous materials. But as significant risk is involved in chemical transportation, it may be difficult to extrapolate protectionist motivations from state laws governing its safety. Additionally, economic protectionism may not be readily evident where the effect is to create an economic deficit, shunting trade away from the state. Laws severely restricting or prohibiting hazardous materials transportation may appear to deprive a jurisdiction of tangible economic benefit, thereby failing to coincide with notions of protectionism as unfair retention of benefit within the jurisdiction.

However, economic protectionism may also be viewed as enjoyment of a disproportionate advantage in favor of intrastate interests, "throwing the attendant burdens on those without the State." A state may see itself in a better long-term economic posture by refusing certain trade, such as toxic wastes, which could eventuate into environmental contamination, or hazardous materials, which might result in catastrophe en route.

State hazardous materials regulations, purporting to promote local safety interests, may clandestinely intend to detour perceived dangers onto the highways and rails of other jurisdictions. In this respect, similarity can be drawn to the truck and train-length cases. As illustrated in Kas-

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64. See, e.g., Jersey Cent. Power & Light Co. v. Lacey, 772 F.2d 1103 (1985), where an ordinance prohibited importation of spent radioactive fuel intended for storage or disposal within defendant locality, which just happened to host a large nuclear waste processing facility.
sel v. Consolidated Freightways, Corp., the State of Iowa unsuccessfully sought to exclude sixty-five-foot cargo trailers from its highways. Iowa maintained its motives were purely to further highway safety. However, the Supreme Court pointed out several economically favorable domestic exemptions which indicated "... Iowa seems to have hoped to limit the use of its highways by deflecting some through traffic."66

Illinois v. General Electric Co.67 struck down an Illinois statute banning the importation of spent nuclear fuel into the state. As in Philadelphia, the statute lacked a basic fairness, being directed against interstate shipment of nuclear wastes destined for final storage in Illinois, while not presuming to regulate such transportation within the state itself. Employing origin as a basis for banning nuclear waste from its highways, Illinois impermissibly discouraged legitimate, albeit unwanted, interstate commerce.

Having satisfied the requirement of evenhandedness, the constitutional inquiry turns to whether the measure nevertheless unduly burdens interstate commerce.68 Cases in which non-discriminatory local safety measures run afoul of the Commerce Clause are exceptional.69 But while there exists a strong presumption of validity in favor of state safety laws, the presumption is not irrebuttable. Legitimate safety statutes may still exceed the limits permitted under the Commerce Clause and are subject to a multifaceted constitutional inquiry, including whether the effect on commerce is direct or incidental, what the actual burdens and putative local benefits are, whether the benefits might be promoted in a less burdensome way, and whether, in the total analysis, the burden on interstate commerce is clearly excessive in relation to the benefits derived from the local measure.70

In one of the few cases striking down evenhanded state safety measures, Bibb v. Navajo Freight Lines, Inc.,71 the Supreme Court affirmed an injunction against enforcement of an Illinois law requiring all trucks operating within the state to be equipped with a peculiar style of splash guard. The overwhelming majority of states sanctioned a standard splash guard now outlawed within Illinois. Plaintiffs affirmatively overcame the strong presumption of validity by showing the innovation represented substantial

66. Id. at 677.
expense and inconvenience, while having little contribution to truck safety. Out of step with a prevailing standard, the Illinois provision was not offset by an viable safety benefit warranting such a deviation.

The presumption of validity was not overcome, however, in National Tank Truck Carriers, Inc. v. Burke where a Rhode Island regulation called for hazardous materials trucks to be equipped with "two-way radios." The Court found such novel equipment would enhance communications in the event of an emergency and entail minimal cost. A citizenband radio, a relatively inexpensive item already installed in many trucks, would satisfy the requirement.

VII. PREEMPTION OF PARTICULAR STATE MEASURES

Certain aspects of hazardous materials transportation are sostringently regulated at the federal level and demand standardization to such a degree that "... it is difficult to envision any situation where State or local regulations would not present an obstacle to the accomplishment and execution of the HMTA and the Hazardous Materials Regulations."73

This federal exclusivity particularly resides in the area of cargo packaging and containment. Thus, where Rhode Island required a special compartment lock on certain tank trucks, such was found to be in direct conflict with the HMTA.74

The preemptive effect of federal law upon state driver and operational safety equipment regulations is considerably less scope. Vehicle equipment and driver requirements are incorporated by reference into the HMTA from the Federal Motor Carrier Safety regulations.75 A less far-reaching preemption test governs this body of regulation:76

Except as otherwise specifically indicated, Parts 390-397 of this subchapter are not intended to preclude States or subdivisions from establishing or enforcing State or local laws relating to safety, the compliance with which would not prevent full compliance with these regulations by the person subject thereto.

In National Tank Truck Carriers, Inc. v. Burke,77 a state requirement for illuminated rear bumpers on tank trailers was found to conflict with federal regulations. Of particular note is Ranger Division, Ryder Truck Lines, Inc. v. Bayne,78 where Federal Motor Carrier Safety regulations

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73. Supra, note 39, at 75566.
74. id. at 75566.
75. 49 C.F.R. § 177.804 (1984):
   Motor carriers and other persons subject to this part shall comply with 49 C.F.R., Parts 390 through 397 (excluding Sections 397.3 and 397.9) to the extent those rules apply.
76. 49 C.F.R. § 390.30 (1985).
77. Supra, note 72.
78. 214 Neb. 251, 333 N.W.2d 891 (1983).
mandating minimum physical qualifications for drivers were found to pre-
empt a state law prohibiting discrimination against the handicapped. Ap-
pellee motor carrier did not discriminate in refusing to hire appellant
driver-applicant, who had previously lost the fingers of his right hand.

VIII. PREEMPTION OF STATE ROUTING MEASURES

Admission of growing localized participation is evidenced by increas-
ing organization of the highway routing of hazardous materials vehicles;
a matter "... different from the more traditional safety controls such as
packaging, package marking, vehicle placarding and loading."79 The
power to prescribe specific hazardous materials corridors continues to
become a thriving issue among states and localities; however, the
HMTA80 empowers the Secretary of Transportation to promulgate regulat-
ing high routing of hazardous materials.81

True routing measures are characterized as those which seek to
avoid some indigenous landmark or are otherwise "directly related to
characteristics that are peculiar to a special geographic location."82 A
general routing provision, codified at 49 C.F.R. 397.9, exists within the
Federal regulations, stating in pertinent part:83

Unless there is no practicable alternative, a motor vehicle which contains
hazardous materials must be operated over routes which do not go through
or near heavily populated areas, places where crowds are assembled, tun-
nels, narrow streets, or alleys . . .

While more detailed regulations have been adopted covering radio-
active materials,84 courts have not been persuaded that Section 397.9
evines a general federal intent to preempt state hazardous materials
routing measures.85 The Secretary concurs with this assessment.86

Apart from the HMTA, routing measures nevertheless remain open to
constitutional inquiry. Local routing measures are more likely to pass
muster where their focus is limited to averting some potentially hazardous
obstacle, such as a bridge, tunnel, school, or populated area, by redi-

79. Supra, note 49, at 5300.
80. In 1985, for example, State Senator Norman Levy introduced several hazardous materi-
als transportation bills into the New York State Senate. S.4954 proposed creation of a state
Hazardous Materials Transportation Board with broad powers to establish routes. While the
measure passed the Senate after modification, it was not signed by Governor Cuomo. Un-
daunted, Senator Levy reintroduced his seminal bill as S.9012 into the 1986 Senate Session,
where it remained.
82. Supra, note 49, 5303.
83. 49 C.F.R. § 397.9(a)(1985).
84. 49 C.F.R. § 177.825 (1985); covering routing and training requirements for radioactive
materials transportation.
86. Supra, note 49, at 5300.
recting transportation of hazardous materials over safer alternate thoroughfares.

For example, in National Tank Truck Carriers, Inc. v. City of New York, 87 certain fire department directives imposed restrictions upon trucks carrying hazardous gases through New York City. In large part, the measures kept these trucks at arm’s length, forcing them to circumvent urban New York primarily by driving through New Jersey.

Appellants sought declaratory relief, maintaining the regulations posed an unconstitutional burden on interstate commerce. However, the Court found the modest increase of about one hour’s journey in bypassing New York City supportable by unique local conditions. Metropolitan New York possesses unusual demographic features, such as high structures and population densities, not prevalent in outskirting communities. Additionally, it has an extensive network of subterranean utility tunnels, prone to accumulate explosive liquids and vapors in the event of a hazardous materials incident. The imposition of specific routes and curfews for hazardous bulk gas transporters was found to be in harmony with the HMTA, and constitutionally minimal, when balanced against the public interests in avoiding a catastrophe in densely populated urban New York.

IX. PREEMPTION OF STATE CURFEW MEASURES

Within the framework of the HMTA, state restrictions on the permissible times of travel for hazardous materials trucks are treated differently than routing measures and may have effects extending well beyond the enacting jurisdiction.

In National Tank Truck Carriers, Inc. v. Burke, 88 a state-wide curfew forbade hazardous gas transportation during certain prescribed hours. The District Court found the measure had the effect of preventing entry into Rhode Island, forcing a shift in the flow of commerce which unnecessarily exposed adjacent states to risk. 89

In order to protect Rhode Island citizens, the Division could have increased the risk of accidents involving hazardous materials for the citizens of Massachusetts and Connecticut.

While a temporary delay occasioned by a single curfew may not be overly burdensome, the unavoidable effect of a multiplicity of curfew restrictions is significant and cumulative delay. Additionally, as trucks course their way through various jurisdictions, time of operation limitations imposed upon them en route may produce a ripple effect, relieving one location from exposure to risk, while at the same time transmitting

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87. 677 F.2d 270 (2d Cir. 1982).
88. Supra, note 72.
89. Id. at 518.
that risk to other locations. Postponing entry of hazardous materials trucks encourages extra-jurisdictional chokepoint, jeopardizing persons and property remote from those localities deriving a direct, pecuniary benefit from the shipment. A terminus jurisdiction may thereby endanger other communities without like economic interest or foresight to pass the risk further away.

The Department views local restrictions on times of travel as defeating Congress' intent for uniformity and as an impediment to the safe movement of hazardous materials.\(^90\)

The manifest purpose of the HMTA and the hazardous materials regulations is safety in the transportation of hazardous materials. Delay in such transportation is incongruous with safe transportation. Given that the materials are hazardous and their transportation is not risk-free, it is an important safety aspect of the transportation that the time between loading and unloading be minimized.

As a practical matter, routing and curfew requirements will always impose a degree of burden, bringing their validity into question. Instead of suppressing essential products and services, states and localities would do well to orient their thinking towards improving hazardous materials response capability.

When a chemical mishap occurs, oftentimes the consequences are exacerbated by the local emergency responders' lack of familiarity with hazardous materials.\(^91\) Insufficient training, funding and planning are facts which plague the local fire departments typically called upon to quell hazardous materials transportation incidents.\(^92\)

Rising public concern recently prompted State Senator Raymond Lesniak to form a group within his heavily industrialized district in northern New Jersey to comprehensively address hazardous materials response. The Hazardous Materials Advisory Council of Union and Middlesex Counties (HMAC) pools resources and expertise of industry, local government and community groups into a highly effective emergency response program.\(^93\) The success of HMAC serves as a pattern for other communities.

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90. Supra, note 39, at 75571.
91. The local fire department usually is called upon to deal with a major transportation disaster . . . Many fire departments—particularly in rural areas have inadequate training in dealing with the products that are nowadays shipped in such profusion in large volumes. Fawcett & Wood, Safety and Accident Prevention in Chemical Operations at 681-82 (1982).
X. PREEMPTION OF STATE PERMIT AND LICENSE MEASURES

Various entities require parties to obtain permits or licenses before transporting hazardous materials through their jurisdictions.94 It has been held that a "bare" permit or license requirement is not inconsistent with the HMTA.95 However, "... a permit itself is inextricably tied to what is required in order to get it."96

New Hampshire Motor Transport Assoc. v. Flynn97 validated a state hazardous materials permit scheme. Plaintiffs argued that the mandatory permit, available only during weekday business hours, would result in delay of transportation in contravention to the HMTA, and particular, a federal regulation which mandates the expeditious movement of hazardous materials:98

No unnecessary delay in movement of shipments. All shipments of hazardous materials shall be transported without necessary delay, from and including the time of commencement of the loading of the cargo until its final discharge at destination.

Offering the permit on an annual basis afforded ample opportunity to truckers anticipating transportation to be conducted after business hours to secure a permit in advance. Those unable to foresee this need would be compelled to either wait until the next business day or substitute equipment already possessing an annual permit, inconveniences the Court found insufficient to offend the HMTA.

By way of contrast is National Tank Truck Carriers, Inc. v. Burke,99 where a state regulation required certain liquid natural gas carriers to obtain a hazardous materials transportation permit, available solely on a per-trip basis. Additionally, application had to be submitted not less than four hours prior to shipment. This requirement was held inconsistent with the HMTA, particularly the "unnecessary delay" language of Sec. 177.853(a).100

Evidence before the Court indicated it would be impossible to submit the permit application until truck loading operations were completed. As it was shown the chemical tended to become increasingly volatile when en route for long periods, this hiatus in shipment imposed needless risks

94. For example, Sec. 403.7, Hazardous Substances Transportation Board Rules, Penn. Turnpike Comm., requires motor carriers to obtain annual permits and maintain certain records to transport hazardous materials on the turnpike. Carriers must also name the Commission as an additional insured party under their automobile liability policy and hold the Commission harmless for all claims incurred while using the turnpike.
96. Supra, note 39, at 75570-71.
97. Supra, note 95.
98. 49 C.F.R. § 177.853(a) (1985).
99. Supra, note 72.
100. Supra, note 98.
onto neighboring states, which could expect to host queues of gas-laden
trucks awaiting permission to lawfully enter Rhode Island.

While dissimilar in result, the above two decisions provide a cohesive
approach by linking the validity of such requirements to the ease with
which a permit may be obtained. Diminished obtainability, as Burke in-
dicates, invites preemption. Hazardous materials transportation permits
more readily available, as in New Hampshire, stand a greater likelihood of
validity.

Restrictive hazardous materials truck permit requirements may also
carry with them undesirable reciprocal effects. By adopting stringent per-
mit requirements, states may themselves become hazardous materials
havens. Unilateral permit restrictions could produce retaliatory prohibi-
tions, causing a jurisdiction which thwarts entries to unwittingly retain
shipments neighboring localities refuse to accept.

In Browning-Ferris, Inc. v. Anne Arundel County, defendant county
passed an ordinance prohibiting disposal of hazardous wastes within its
boundaries. The measure also imposed restrictions on hazardous waste
transportation, including a minimum license fee of $1000 and detailed
paperwork to be carried on each truck passing through the country.

In striking the measure down, the Court recognized the deleterious
effect of a "battle of the permits," observing that:

... if Anne Arundel County may enact such requirements consistent with the
Commerce Clause, so may other counties in Maryland, and counties in every
other state as well. If each county has that power to regulate, it follows that
each would have authority to enact regulations unique unto itself. Every
county, then, could have regulations in this area different from those of every
other county. If those other counties enacted regulations in the area, a per-
son transporting hazardous wastes from New York through Maryland to Vir-
ginia would be burdened not simply with the responsibility of meeting the
requirements of Anne Arundel County, and those of several other counties in
Maryland, but of every other local government in every state on his route.

As more jurisdictions adopt such restrictive measures, the cumula-
tive obstacle to commerce may compel alternative means of controlling
hazardous materials over the highways. An alternative with measurable
benefit to highway safety would be to develop the skills needed by drivers
who haul hazardous materials. Special licensing for this category of
driver would document a minimum level of hazardous materials
competence.

102. id. at 274-275.
103. While it has been estimated that human error accounts for more than 64% of hazardous
materials incidents, training requirements under the hazardous materials regulations remain
woefully inadequate:

Most drivers transporting hazardous cargoes simply have to take, but not necessarily
The U.S. Department of Transportation recently issued a notice of proposed rulemaking which would strengthen existing hazardous materials driver qualifications. 104 Unfortunately, their approach falls short of promulgating a national hazardous materials operator's license. The National Transportation Safety Board strongly advocates some form of special hazardous materials operator licensing. The Board’s proposal represents a positive and workable means to improving hazardous materials safety on the highway. 105

XII. SURVIVAL OF COMMON LAW ACTIONS UNDER THE HMTA

Where there have been parties who have been injured in some manner by hazardous materials transportation activities, the threshold inquiry regards the extent to which the HMTA abrogates private rights of recovery. Other than preempts inconsistent state "requirements," 106 the Act remains silent as to the survival of individual actions either imposed by virtue of the statute, 107 or arising under common law. 108

The validity of actions alleging a breach of duty created by statute has been determined through the following variously applied criteria, including: whether the plaintiff qualifies as part of the class intended to come within the enactment's scope of protection; and whether the hazard was of a nature the enactment intended to prevent. 109

The HMTA provides protection of the public from accidents involving

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104. FHWA Qualifications of Drivers; Drugs, § 391.1 (1986).

105. The Safety Board also believes that there is a need to collect data for use in determining the minimum level of operational experience for a special license or certification as well as for determining the number of traffic accidents, the traffic violation convictions, and the license suspensions that should disqualify drivers who apply for a special class of license or certification to transport hazardous materials.


107. Unlike citizen suit provisions drafted into other environmental and safety statutes (for example, 42 U.S.C. Section 6972, Resource Conservation and Recovery Act of 1976), the HMTA does not allow for individuals to assume the role of private attorney general in seeking to redress perceived violations of the Act or its regulations. Borough of Ridgefield v. New York Susquehanna & Western R. Co., 632 F. Supp. 582 (D.N.J. 1986).

108. It has been held that the HMTA "... evidences no intent to affect state regulation of tort liability." S. Pac. Transp. Co. v. United States, 462 F. Supp. 1193, 1225 (E.D.Ca. 1978).

hazardous materials transportation.\textsuperscript{110} Thus, where a plant employee was injured while pouring acid from a drum shipped some twenty days previous, he failed to demonstrate the delivering carrier owed him any duty by virtue of the HMTA.\textsuperscript{111}

In Seaboard Coast Line Railroad v. Mobil Chemical Co.,\textsuperscript{112} a rail tank car containing phosphorus trichloride derailed, causing the evacuation of a community. Substantial third-party claims were incurred by Seaboard, the rail carrier. Seaboard's investigation attributed the accident to a tank car defect. Mobil, shipper of the chemical and lessee of the car, applied for a declaratory judgment to determine its liability.

Seaboard counterclaimed on negligence and strict liability for breach of express and implied warranties, alleging Mobil had made representations under certain hazardous materials regulations\textsuperscript{113} which required certification that, among other things, the materials were in condition suitable for transportation.

The Court found no duty in warranty under the relevant regulations, stating the clear import of the HMTA:\textsuperscript{114}

\ldots is to provide a system designed to protect the general public from unreasonable risks to health, safety or property posed by the transportation of such hazardous materials in commerce, not to impose a strict liability on the part of shippers of these materials, burdening them with an absolute duty to insure against all risks of harm.\textsuperscript{115}

Hazardous materials transportation activities, conforming to the minimum proscriptions embodied in the HMTA or regulations thereunder, may nonetheless fall short of a reasonable standard of care. Mere conformance with statutes and regulations is insufficient to insulate a party from responsibility for his tortious conduct, and injuries arising from such activities which may involve a breach of duty owed under common law.\textsuperscript{115}

Generally speaking, where causes of action merely air some personal grievance concerning the HMTA, alleging damages merely prospective or speculative, courts have relegated plaintiffs to their available administrative remedies.

Causes of action at common law for nuisance, seeking to enjoin activities condoned by the HMTA, have not found judicial support. Consolidated Rail Corp. v. City of Dover\textsuperscript{116} involved a suit to enjoin local railyard

\begin{thebibliography}{99}
\item 49 C.F.R. § 172-204 (1985).
\item Supra, n.112, 323 S.E.2d at 52.
\item Adherence to statutes and administrative regulations may be some evidence of due care, but compliance does not preclude a finding that defendant failed to meet a reasonable standard of care. Blasing v. P.R.L. Hardenberg Co., 94 N.W.2d 697 (Minn. 1975).
\item Consolidated Rail Corp. v. The City of Dover, 450 F. Supp. 966 (D. Del. 1978).
\end{thebibliography}
switching of chemical-laden freight cars. The complaint, based in tort for public nuisance, did not allege a violation of HMTA standards and failed to state how the movement of hazardous materials injured the plaintiff.

The Court, while declining injunctive relief on the basis of primary jurisdiction, went on in dicta, to postulate that Section 112(a)\textsuperscript{117} of the HMTA would operate to preempt state common law nuisance remedies, as well as state statutory law:\textsuperscript{118}

What Dover may not do directly through enforcement of its ordinance, it may not do indirectly by means of a common law claim for nuisance. It would be incongruous for the Court to hold otherwise.

A similar result was achieved on the merits in another nuisance action, \textit{Kappelman v. Delta Air Lines, Inc.},\textsuperscript{119} discussed above, where the Court refused to paint activities, sanctioned by the Act, with a broad brush of liability, pointing out the absurdity of providing a hazard warning to airline passengers when a plane carries materials regarded within the federal regulations as safe.

The HMTA does not operate to preempt all relief at common law. Apart from the nuisance torts, negligence actions are more survivable where aggrieved parties have incurred substantial damages. Some doubt exists, however, concerning the availability of strict tort liability for injury arising out of the shipment of hazardous materials.\textsuperscript{120}

Under Section 402A, Restatement (Second of Torts, strict liability may be imposed upon those introducing into commerce "... any product in a defective condition unreasonably dangerous to the user or consumer or to his property."\textsuperscript{121} A second formulation of strict tort liability rests in Section 519, Second Restatement for injury from abnormally dangerous activities.\textsuperscript{122}

\begin{footnotesize}
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  \item 117. 49 U.S.C. § 1811(a) (1976).
  \item 119. Kappelman v. Delta Airlines, Inc., 539 F.2d 165.
  \item 120. A number of jurisdictions have relegated plaintiffs to a negligence cause of action. Forrest v. Imperial Distrib. Services, 712 P.2d 488; Ozark v. Stubb’s Transports, 351 F. Supp. 351 (W.D.Ark. 1972); Christ Church Parish v. Cadet Chemical Corp., 25 Conn. Sup. 191, 199 A.2d 707 (1964); Garrett v. E.I. DuPont de Nemours & Co., 257 F.2d 687 (3d Cir. 1958); Reddick v. General Chem. Co., 124 Ill.App. 31 (1905). Several of these cases turned on defendant's status as a common carrier of property, the theory being that strict liability should not be imposed on common carriers having an obligation to accept and transport public goods, including hazardous materials. Actiesselskabet Ingrid v. Central Railroad, 216 F.72 (2d Cir.); cert. denied, 239 U.S. 615 (1914). The fairness of excepting common carriers from a strict liability standard has been questioned, in that they are remunerated for their transportation services. Common Carriers and Risk Distribution: Absolute Liability for Transporting Hazardous Materials, 67 Ky. L.J. 441 (1978-79). This argument overlooks the liability of the party controlling the shipment and enjoying the lion's share of economic benefit, namely, the shipper.
  \item 121. Restatement (Second) of Torts § 402A (1977).
  \item 122. (1) One who carries on an abnormally dangerous activity is subject to liability for harm to the person, land or chattels of another resulting from the activity, although he
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While product liability concerns goods containing some unreasonably unsafe flaw, considerations of product defect are largely irrelevant under Section 519. This provision looks not only to the nature of the thing or activity, but also to the relationship to its surroundings.\textsuperscript{123}

The origins of Section 519 trace themselves to a niche carved from common law negligence to accommodate the use of blasting explosives.\textsuperscript{124} More recently, some courts have expanded strict liability to include activities involving chemical shipments.

It may seem incongruous for activities condoned by safety regulations to be considered abnormally dangerous. However, courts, unwilling to bind themselves by legislative definitions, are free to inquire independently as to the tortious nature of an activity.\textsuperscript{125}

Section 520 of the Second Restatement\textsuperscript{126} is straightforward in outlining the conditions operant for the rule of abnormally dangerous strict liability:

In determining whether an activity is abnormally dangerous, the following factors are to be considered:
(a) existence of a high degree of risk of some harm to the person, land or chattels of others;
(b) likelihood that the harm that results from it will be great;
(c) inability to eliminate the risk by the exercise of reasonable care;
(d) extent to which the activity is not a matter of common usage;
(e) inappropriateness of the activity to the place where it is carried on; and
(f) extent to which its value to the community is outweighed by its dangerous attributes.

While what constitutes an abnormally dangerous activity is a question of law for the courts to decide,\textsuperscript{127} judicial application of these criteria to a particular activity may produce arbitrary results. For example, although increasingly applied to injury from chemicals, abnormally dangerous strict liability has not generally been extended to harm arising from the use of other non-defective products, such as handguns.\textsuperscript{128}

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\textsuperscript{123} Emphasizing this aspect, the Second Restatement substitutes an “abnormally dangerous” concept for “ultrahazardous,” used in the First Restatement.
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\textsuperscript{124} See, for example, Federoff v. Harrison Constr. Co., 362 Pa. 181, 66 A.2d 817 (1949).
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\textsuperscript{125} See, for example, S. Nat. Gas. Co. v. Gulf Oil Corp., 320 S.2d 917 (1975); cert. denied, 324 S.2d 812 (La. App. 1976).
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\textsuperscript{126} Restatement (Second) of Torts § 520 (1977).
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\textsuperscript{128} Imposing liability for the sale of handguns, which would in practice drive manufacturers out of business, would produce a handgun ban by judicial fiat in the face of the decision by Illinois to allow its citizens to possess handguns. A change in this policy... would require that manufacturers of guns, knives, drugs, alcohol, tobacco and other dangerous products act as insurers against all dangers produced by their products.
\end{flushright}
Strict liability was applied to the highway transportation of gasoline in *Siegler v. Kuhlmann*, where a tractor and tank-trailer combination separated while underway, spilling the flammable contents over the highway. The ensuing fire engulfed plaintiff's decedent, driver of an automobile traveling the same road.

Ostensibly drawing authority from Section 519, the *Siegler* court encounters difficulty with the concepts underlying abnormally dangerous liability, observing that no degree of due care can protect the public: from the disastrous consequences of concealed or latent mechanical or metallurgical defects in the carrier’s equipment, from the negligence of third parties, from latent defects in the highways and streets, and from all of the other hazards not generally disclosed or guarded against by reasonable care, prudence and foresight.

Had the court restricted its focus, rather than interspersing irrelevant concepts of defect more suited to product liability, it is doubtful the defendant’s conduct would have supported a recovery of damages predicated solely on abnormally dangerous liability. Gasoline delivery is hardly an uncommon venture in which the public acts as a disinterested observer. Society, fundamentally reliant upon the customary and safe delivery of gasoline, has an important stake in the accessibility such widespread distribution provides. Ascribing abnormally dangerous liability to gasoline transportation is inconsistent with the prerequisites for strict liability outlined in Section 520 of the Second Restatement. As a result, *Siegler* presents an unsound restatement of the theory underlying abnormally dangerous strict liability.

Another decision affecting common law duties of hazardous materials transporters is *Indiana Harbor Belt Railroad v. American Cyanamid Co.* involving a railcar leak of acrylonitrile which resulted in substantial damage. The matter appeared before the Northern District of Illinois on a pretrial motion to dismiss. The Court, sitting in diversity, concluded as a matter of first impression that Illinois law would support an actionable duty for transporting acrylonitrile under abnormally dangerous strict liability theory. Leaving the issue of breach of this duty to the trier of fact, it re-

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Whatever the economic wisdom of such a policy might be, there is no basis for assuming that Illinois law wishes to adopt it. *Martin v. Harrington & Richardson, Inc.*, 743 F.2d 1200, 1204 (7th Cir. 1984).


130. A rule of abnormally dangerous strict liability for gasoline transportation has been rejected in Kentucky, because “... of the general usage of gasoline, the need of using the public highways in its distribution, the administrative facilities available for the regulation of its transportation, and the great care ordinarily followed in handling it.” *Collins v. Liquid Transporters*, 262 S.W.2d 381 (Ky. 1953).


viewed the complaint, observing: 133

The complaints here allege shipping acrylonitrile is an inherently dangerous activity both because of the characteristics of the chemical and the type of equipment upon which it was transported. Plaintiff argues that the natural and probable consequences of loading and transporting acrylonitrile in a defective tank care is property damage and personal injuries and cites the actual damage which allegedly occurred. [emphasis supplied]

As Indiana Harbor Belt concerned pretrial issues, the eventual outcome of plaintiff's proofs is merely speculative. Yet, plaintiffs won a stirring victory by establishing abnormally dangerous strict liability at this preliminary stage. Assuming the trial evidence indicated a tank car defect to be the sole proximate cause, plaintiff would then have had no sustainable action against the non-negligent transporter. Plaintiff deftly eliminated some troublesome elements of proof from his prima facie case against the transporter. The successful result not only spread liability, it shifted the burden to the transporter to implead other defendants, such as the tank car manufacturer, with which to participate in his damages. By way of Indiana Harbor Belt, chemical transporters become insurers of all perils associated with the movement of their cargoes.

Imposition of strict liability is viewed as a socially expedient means to gather money damages sufficient to properly compensate a loss. 134 As an overriding judicial policy aim is to insure the costs of injury are borne by someone deriving a benefit from an injurious activity, nexus to the injury becomes less relevant in framing relief than a defendant's accessibility and ability to pay. 135 Objective analysis of the bases of strict liability for abnormally dangerous activity will continue to be difficult where fault is assigned primarily on the depth of the defendant's pockets. In the interests of building objective case law, and in elemental fairness to chemical defendants, courts should abandon the confusing semblance of logic in this approach and apply a rule of strict liability honestly tempered by the criteria in Section 520.

133. Id. at 317.

134. There is a growing belief, however, that in this mechanical age the victims of accidents can, as a class, ill afford to bear the loss; that the social consequences of uncompensated loss are of far greater importance than the amount of the loss itself; and that better results will come from distributing such losses among all the beneficiaries of the mechanical process than by letting compensation turn upon an inquiry into fault.


135. . . . the commercial transporter can spread the loss among his customers who benefit from this extrahazardous use of the highways. Also, if the defect which caused the substance to escape was one of manufacture, the owner is in the best position to hold the manufacturer to account.

Siegler v. Kuhlmann, 502 P.2d 1188 (concurring opinion).
XIII. CONCLUSION

As a result of their indispensable nature, the safe and economical transportation of hazardous materials is a critical necessity. The federal government, through its legislative and rulemaking authority, has made large advances toward this goal. Yet, public antipathy to chemicals has also stimulated local regulatory activity, resulting in a proliferation of oftentimes conflicting controls on hazardous materials transportation.

Hazardous materials are subject to simultaneous and divergent social pressures from industry, regulators, and the public at large. While the nature and sheer volume of chemical substances in transit presents concern to government on all levels, the Balkanization of hazardous materials regulation can only impede commerce and, in the final analysis, community safety. Uniformity, a primary goal of Congress in enacting the Hazardous Materials Transportation Act, remains an elusive one. As a result, courts will continue to play a more active role, reconciling turf disputes over hazardous materials, as well as common law suits stemming from hazardous materials injuries.
Recent Decision


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I. INTRODUCTION

On August 1, 1985, the United States District Court for the Northern District of Illinois, Eastern Division, handed down its decision in Air Line Pilots Association, International v. United Air Lines, Inc. The case grew out of certain unresolved back-to-work issues relating to a month-long pilot's strike. In late September 1986, the decision was affirmed in part and reversed in part by the Court of Appeals for the Seventh Circuit.

The Court of Appeals upheld the District Court's determination that United Air Lines' ("United") attempted strike-related rebid of pilot positions violated the Railway Labor Act ("RLA"), but that the hiring of per-
manent, fleet-qualified replacement pilots at guaranteed salaries did not.\textsuperscript{5} It reversed the District Court’s conclusion that trained “pre-hires,” whose reporting date corresponded with the first day of the strike and who chose to honor the picket lines, were employees under the RLA.\textsuperscript{6} The effect of this reversal was the rejection of the group’s entitlement to preferential reinstatement for subsequently available positions.\textsuperscript{7}

The purpose of this paper is to provide a detailed examination of the Seventh Circuit’s decision through its application of provisions of the RLA to the arguments of the parties.

II. \textbf{BACKGROUND OF THE DECISION}

A. \textbf{PARTIES}

Air Line Pilots Association, International (“ALPA”) is an unincorporated labor organization which is the exclusive collective bargaining representative under the RLA for United’s pilots.\textsuperscript{8} Representation of United’s pilots is controlled by the UAL-MEC (Master Executive Council) which consists of three members elected from each of nine pilot domiciles.\textsuperscript{9}

United is a corporation whose principal place of business and headquarters are located in the Northern District of Illinois.\textsuperscript{10} It is authorized to engage in the business of providing interstate and foreign air service pursuant to certificates of public convenience and necessity issued under the Federal Aviation Act of 1958, as amended.\textsuperscript{11}

B. \textbf{EVENTS PRECEDING THE STRIKE}

Over the years, ALPA and United have successfully negotiated collective bargaining agreements. The agreement in effect prior to the strike was executed in October 1981. Its duration was for two years with automatic renewal each October 1 thereafter, unless one of the parties served a written notice of change at least sixty days prior to October 1.\textsuperscript{12} By agreement, both parties extended the October 1, 1983 deadline to April

\textsuperscript{5} Supra note 3, at 917.
\textsuperscript{6} Id.
\textsuperscript{7} Id.
\textsuperscript{9} Findings of Fact, Air Line Pilots Ass’n., Int’l, supra note 1, at 1023. United pilots operate from bases known as domiciles from which a pilot’s assignment begins and ends. As of the strike date these domiciles were: Chicago, Cleveland, Denver, Honolulu, Los Angeles, San Francisco, Seattle, Miami, and Washington. Supra note 3, at 891.
\textsuperscript{10} Complaint at 1.
\textsuperscript{12} Supra note 1, at 1024. The RLA requires a party in receipt of a notice seeking change in the agreement affecting pay, rules and working conditions to give at least 30 days written notice to the other. 45 U.S.C. § 156 (1982).
1984.  

In January 1984, both parties served written notice of change. The significant issues for negotiation included: new-hire pay rates, incumbent pilot compensation and assignment of cockpit seats. However, as time went on it became apparent that the toughest issue on the table was United’s request for a “new-hire pay scale.” United believed that this was essential to make it cost-competitive with other airlines.

Because the parties could not resolve this issue, the services of the National Mediation Board (“NMB”) were invoked in August 1984. As negotiations continued into the fall of 1984 with the NMB, United also began to develop a contingency plan in the event of a strike. The objectives of this “Operations Adjustment Plan” were to break the strike on terms beneficial to United. The plan as communicated to United Pilots included changes designed to lure strikers across the picket lines. One such change was the so-called “super-seniority” plan to allow working pilots the right to bid for positions opened up by the strike thus “leapfrogging” over more senior striking pilots. Another was to hire permanent, fleet-qualified replacement pilots at guaranteed annual salaries of $75,000 for Captains and $50,000 for First Officers. These salary levels were promised even if the replacements were later reassigned to lower post-strike positions.

At the same time these contingencies were being contemplated, United which had last hired new pilots in 1977-1979, began to feel the pinch of a pilot shortage. In an effort to correct this deficiency, while at the same time not jeopardize “new-hire pay scale” negotiations, United decided to “pre-train” several hundred applicants (“the Group of 500”) who would be offered “formal employment” once a cost-competitive agreement had been secured. These student pilots executed a “Flight Officers Training Agreement” which provided flight training without charge and thirty dollars per day for expenses during the course of training. Under the terms of the contract, student pilots were required to agree that they were not to be employees of United, but would “constitute a pool

13. Supra note 1, at 1024.
14. Id.
15. Id. The Court stressed that though United had an operating profit of over $500 million in 1984, there had been losses over the last five years. Id.
16. The RLA provides that either party may request the services of the NMB, or the NMB may proffer its services, sua sponte, whenever a major dispute is not adjusted by the parties in conference. 45 U.S.C. § 155 (1982).
17. Supra note 1, at 1025.
18. Supra note 3, at 893.
19. Id.
20. Supra note 1, at 1025.
21. Id. at 1025-1026.
of trained candidates for Flight Officer employment which United Air Lines may employ, if need, within twelve months of graduation."^{22}

On April 15, 1985, the NMB, after eight months of negotiations, declared an impasse.^{23} The next day the thirty-day "cooling off" period began.^{24} During this period United offered employment to approximately 347 of the Group of 500 who had completed training. Their report date was May 17, 1985, "whether or not there was a strike."^{25} Subsequent communications to these trainees confirmed that employment would be effective May 17, 1987, and specifically requested that they report to United’s Training Center in Denver, Colorado at 0800 hours, May 17.^{26} Although testimony in the District Court revealed that United had not intended that the Group of 500 be "cross-overs" in a strike, as the deadline approached United informed them that "if they did not work on May 17, they would not work for United in the future."^{27}

On May 16, 1985, ALPA filed an action in District Court alleging that United had violated, or was about to violate, several provisions of the RLA through actions taken during the contract negotiations, as well as its implementation of the "Operations Adjustment Plan."^{28} At 12:01 a.m. (EDT) on May 17, 1985, ALPA declared a strike of United’s pilots;^{29} that same day ALPA filed motions for preliminary injunctions pursuant to the Norris-Laguardia Act.^{30}

By May 20, 1985, United resumed negotiations with ALPA and within two or three days concluded a tentative agreement on the "new-hire pay scale."^{31} Accord as to the terms of back-to-work agreement proved more difficult. It was not until June 14, 1985 that the UAL-MEC ratified both the tentative economic agreement and the back-to-work agreement, thus ending the strike. Both parties agreed that ALPA’s unresolved claims concerning the Group of 500, the pilot rebid and salaries for the permanent replacement pilots would be pursued by ALPA in Federal

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22. Id. at 1026. Prior to this agreement, student pilots were considered employees from the first day of training, paid at rates established under the existing agreement and accrued seniority from the date of hire.

23. Supra note 3, at 893.

24. The RLA prohibits any changes in pre-dispute rates of pay, rules, or working conditions for 30 days after the NMB has notified the parties in writing that mediatory efforts have failed. 45 U.S.C. § 155.

25. Supra note 1, at 1027.

26. Id.

27. Id.


29. Supra note 1, at 1023.

30. 45 U.S.C. §§ 101 et seq. (1982). ALPA sought to enjoin United from, inter alia, hiring outside permanent replacement pilots, direct dealings with its pilot employees and any unilateral changes in rates of pay, rules or working conditions. Complaint at 7-8.

31. Supra note 1, at 1037.
C. STATUTES

During the course of its deliberation, the Court of Appeals focused on the interrelationship and applicability of two statutes: The Railway Labor Act and the National Labor Relations Act. Though both statutes were designed to avoid the disruptive effects of industry work stoppages by promoting the peaceful resolution of labor disputes, they grew out of significantly different labor-management relationships. Therefore, the mechanisms set up to accomplish a common end were considerably different under each act.

1. THE RAILWAY LABOR ACT

The Railway Labor Act of 1926 was, in effect, a "private treaty." It was drafted by a committee of railroad executives and representatives of railroad labor, jointly presented to Congress, and overwhelmingly passed in the House of Representatives and the Senate.

In 1934 the RLA was amended to bar "yellow dog" contracts and to restrict company-dominated unions. Additionally, rail carriers were precluded from influencing employee choice of representation as well as required to negotiate with certified representatives. The amendments also established the National Mediation Board (NMB) as an independent executive branch agency to which the parties could look for help in stalled negotiations.

In 1932 ALPA began lobbying efforts to bring the airlines under the RLA. Although no carrier offered opposition to this move, it was not until 1936 that RLA coverage was extended to the airline industry. The airlines were finally included because of concern about the substantial economic effects resulting from labor disputes and strikes in that

32. Id. at 1023.
33. Supra note 4.
37. A contract whose terms require a worker not to join a union as a condition of employment.
38. Rehmus, supra note 36, at 6.
39. 45 U.S.C. § 154, First (1982). The NMB is composed of 3 members appointed by the President, not more than two of whom can be of the same political party. Id. Simultaneously created was the National Board of Adjustment to deal with disputes involving interpretation and application of existing agreements.
41. Id.
42. 45 U.S.C. § 181.
industry.43

The RLA provides an orderly procedure for handling both major and minor disputes.44 The thrust is toward voluntary settlement of issues, with an emphasis on mediation, if the parties cannot themselves adjust.45

A step-by-step process for major disputes is triggered by a thirty-day written notice of intended change in the agreement by one of the parties.46 Parties who cannot settle a dispute concerning rates of pay, rules or working conditions may invoke the services of the NMB, or the NMB may proffer its services, if it finds a labor emergency exists.47 If the NMB cannot resolve the controversy, it shall encourage, but not mandate, mutually agreed upon arbitration.48 Assuming arbitration is rejected and no emergency board is created by the President, the parties must adhere to a thirty-day cooling-off period during which time neither may make major changes.49

In order to provide for orderly settlements, the status quo must be maintained pending exhaustion of all statutory procedures.50 However, when this process fails "the policy of all natural labor legislation is to let loose the full economic power of each." For labor it is the "cherished right to strike;" for management it is the right to operate or at least try to operate.51

2. **The National Labor Relations Act**

In sharp contrast to the equal bargaining positions of railroads and their employees, the NLRA attempted to address problems in industries creating "great danger to workers and consumers" by the proliferation of employer-dominated unions.52 Introduced as the Wagner Bill on March 1, 1934, in the face of industry hostility, the NLRA necessarily focused on

43. Rehmus, supra note 36, at 10.
44. These terms are not specifically used in the statute. However, the courts have determined that major disputes involve intended changes in agreements affecting rates of pay, rules or working conditions. Minor disputes, on the other hand, pertain to differences over what has already been agreed upon, that is, employees' grievances on interpretation or application of the contract. Empresa Ecuatoriana De Aviacion, S.A. v. District Lodge No. 100, 690 F.2d 838, 842-843 (11th Cir. 1982), cert. dismissed, 463 U.S. 1250 (1983).
45. Rehmus, supra note 36, at 29.
47. Id. at § 155, First.
48. Id.
49. Id.
51. Id.
enforcement. To that end it set out certain activities which constituted unfair labor practices and created an administrative agency, the National Labor Relations Board (NLRB), to prevent them. The NLRB also created a duty, enforceable by the NLRB, on both parties to bargain in good faith.

The NLRB was modeled after the RLA to the extent that it required employers to recognize duly chosen employee representatives and to deal with those representatives to reach satisfactory collective bargaining agreements.

In 1947, the NLRB was amended by the Labor-Management Relations Act ("LMRA"), also known as the Taft-Hartley Act. The LMRA was designed to solve two problems which remained despite the original Act: to reduce industrial disputes and to put employers and unions on equal footing.

The NLRB prohibits, as does the RLA, either party from modifying an existing agreement until certain procedures have been followed. The party desiring change must:

(a) serve written notice on the other 60 days prior to the contract expiration or 60 days before it proposes to make such change;
(b) offer to meet with the other party to negotiate a new or modified contract;
(c) notify the Federal Mediation and Conciliation Service within 30 days after written notice of the existing disputes;
(d) continue in force all the terms of the existing contract for 60 days after notice is given, or the expiration of the contract, whichever is greater.

Although labor's right to strike is explicitly recognized in the NLRB, economic action by either side prior to the expiration of the 60 days is considered an unfair labor practice. Claims may be brought to the NLRB which has the power to issue a complaint and hold a hearing on the matter. The NLRB may also petition any U.S. Court of Appeals to enjo...

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53. Id. at 1.
54. Id. at 3-4; 29 U.S.C. § 158 (1982).
55. Id. at 4-5; 29 U.S.C. § 160 (1982).
56. 29 U.S.C. § 158(d). Though the duty is implied in the RLA under 45 U.S.C. § 152. First, it seems to be just as enforceable as that of the NLRB. However, the absence of a specialized administrative agency and the courts' general hands off approach to the RLA has meant much less government intervention. Supra note 35, at 152.
57. However it should be noted that the NLRB specifically excluded anyone subject to the RLA from its coverage. 29 U.S.C. § 182.
59. Id. at §§ 141(b), 151.
60. Id. at § 158(d).
61. Id. at § 163.
62. The NLRB sets forth what constitutes unfair labor practices by both employers and unions. Id. at § 158(a), (b).
63. Id. at § 160(a), (b).
force its decision. In addition to the NLRB, the Taft-Hartley Act created the Federal Mediation and Conciliation Service to be used as a last resort by the parties. The service may become involved in a controversy only where the dispute would cause substantial interruption to commerce. In the event that a strike would cause a threatened or actual emergency, the Act provides a method for enjoying it.

III. ARGUMENTS OF THE PARTIES

As stated earlier, three issues which grew out of the strike of ALPA against United were submitted for judicial determination. The first issue was United's strike plan to allow working pilots an opportunity to bid for vacancies left by striking pilots. The second issue involved United's hiring of permanent replacement pilots at guaranteed salaries. The final issue concerned the status of certain trained pre-hires (the Group of 500) whose reporting date was that of the strike, but who refused to cross the picket lines. Intertwined throughout the arguments on specific issues was the parties' basic disagreement about the applicability of the provisions of the NLRA to an industry covered by the RLA.

A. APPLICABILITY OF THE NATIONAL LABOR RELATIONS ACT TO PARTIES SUBJECT TO THE RAILWAY LABOR ACT

1. UNITED'S ARGUMENT: The most fundamental error committed by the District Court was its almost exclusive reliance on authorities interpreting the NLRA rather than the RLA. The RLA is sui generis and cannot be read in pari materia with the provisions of the NLRA. Citing a number of Supreme Court cases, United reiterated the maxim that the "nature and history of the transportation industry distinguished the RLA from the NLRA." Quoting Board of Railroad Trainmen v. Jacksonville Terminal Co., United pointed out that this history established that "the National Labor Relations Act cannot be imported wholesale into the railway labor arena. Even rough analogies must be drawn circumspectly, with due regard for the many differences between the statutory schemes."

Nowhere were the differences between the two acts more dramatic
than the statutory mechanisms for dealing with dispute resolution. The RLA left the entire settlement to non-compulsory adjustment. After the parties have exhausted the process calling for self-adjustment and mediation, they are free to resort to self-help measures. These measures were in explicit in the RLA, but absent specific standards, the more acceptable answer was to allow the parties to "employ the full range of whatever economic powers they can muster so long as its use conflicts with no other obligation imposed by law." United further noted that the NLRA, by contrast, continuously regulates the parties even after a bargaining impasse is reached by way of specific statutory "unfair labor practices." Concluding that these proscriptions were in response to the embryonic nature of industries covered by the NLRA, United rejected the idea that such protection extended to the lawfulness of a carrier's exercise of its self-help rights.

2. ALPA'S ARGUMENT: The purposes of both the NLRA and RLA identically protect employees' right to self-organize, to bargain collectively through their own representatives, and the right to belong to a labor union without suffering discrimination. The RLA amendments which prohibited employer interference with those rights and the NLRA were introduced within the same month. ALPA asserted that in the Senate debate, Senator Wagner himself confirmed the close relationship between the two acts. Therefore, ALPA reasoned, those provisions of the NLRA containing identical terms and statements of purpose were entitled to "substantial consideration in determining the scope of RLA protection."

B. STATUS OF THE PRE-HIRE PILOT TRAINEES

1. UNITED'S ARGUMENT: The District Court reached its high-water mark in misinterpreting the RLA when it concluded that the pre-hire trainees were employees as of May 17, 1985. First, United contended, the District Court erred when it held that United violated Section 2, Fourth, of the RLA which prohibits employers from forcing employees to reject

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72. Appellant's Brief at 24.
73. Id. at 25.
74. Id.
75. Id. at 26-27 (quoting Board of R.R. Trainmen, supra note 71, at 392-393).
77. Id. at 27.
79. Id. at 26-27.
80. Id. at 27.
81. Specifically, ALPA pointed out that the sec. 7 Statement of Purpose in the NLRA was identical to sec. 7 of the RLA. Additionally, sec. 8(a)(3) of the NLRA and sec. 2, Fourth, of the RLA, both prohibited employer efforts to discourage union membership. Id. at 25 n.7.
union membership. It further challenged the Court's reliance on the NLRA's unfair labor practice provisions for guidance in interpreting this section. The legislative history of the 1934 amendments to the RLA confirmed, United argued, that Section 3, Fourth, was not intended to "state a broad charter of employee rights comparable to the unfair labor practices catalogued in the (NLRA), but was intended solely to prevent employers from coercing employees into joining unions favored by the carrier."

Even if the RLA could be so broadly read, Section 2, Fourth, protected "employees" only. The RLA specifically defined employees as "every pilot or other person who performs any work as an employee or subordinate official of such carrier or carriers subject to its continuing authority to supervise and direct the manner of rendition of his service."

The District Court held that none of the pre-hires were employees of United on May 16, but that they were on May 17. However, those of this group who did not report on May 17 never performed any work for United. Instead, they refused to perform any work and were never subject to United's continuing authority to control. To support its claim, United cited an NMB decision, Air Micronesia, which involved trainees such as the Group of 500. In that case the NMB held:

Clearly, a person who has been trained in the hope of a future job offer, but is free in interim to seek any other employment, and whose present availability is unknown, is not a person subject to the carrier's "authority to supervise and direct the manner of rendition of his service."

2. ALPHA'S ARGUMENT: The District Court's application of the concept of common law offer and acceptance was correct in this case. The Group of 500 accepted unconditional offers of employment with an effective date of May 17, 1985. United merely confirmed that the trainee's change to permanent status would occur on the specified date. This theory, ALPA contended, was consistent with the RLA definition of employee which "subsumed the common law background in which the employment concept developed." Moreover, United's attempt to require the Group of 500 to cross the picket lines in order to physically report to

82. Appellant's Brief at 29.
83. Id. at 30.
84. Id. at 31 (quoting Brady v. Trans World Airlines, Inc., 223 F. Supp. 361, 365 (D. Del. 1963), aff'd, 401 F.2d 87 (3rd Cir. 1968), cert. denied, 393 U.S. 1048 (1969)).
85. Id. at 34.
87. Appellant's Brief at 34.
89. Appellee's Brief at 32-33.
90. Id. at 33.
work was contrary to the policies of the RLA.\textsuperscript{91}

ALPA challenged United’s interpretation of the RLA definition of employee. It asserted that the absence of work or supervision was not determinative, since none of the strikers were supervised by United during the strike.\textsuperscript{92} ALPA also noted that the Court of Appeals, in \textit{Nashville, Chattanooga and Saint Louis Railway v. Railway Employees Department},\textsuperscript{93} had recognized as employees furloughed workers who performed no work for the carrier.\textsuperscript{94}

ALPA distinguished the present case from that of the trainees in \textit{Air Micronesia}\textsuperscript{95} who had only the mere hope of an offer if an opening arose sometime in the future.\textsuperscript{96} The Group of 500 had completed substantially the same training as other United new hires, had accepted United’s offer of employment and even returned to Denver to report to work as requested.\textsuperscript{97}

Additionally, ALPA challenge United’s unique treatment of the Group of 500 as violative of the \textit{status quo} provision of the RLA prohibiting either party from unilaterally changing rules, rates of pay or working conditions after service of a notice of change.\textsuperscript{98} Further, ALPA argued, refusal by United to employ the Group of 500 who honored the picket lines was a violation of the RLA. Requiring them not to join a strike was tantamount to an agreement not to join a labor organization, because United was aware strikebreakers would not be allowed to become members of ALPA.\textsuperscript{99}

\textbf{B. COURT OF APPEALS:} The Court of Appeals decided to give a \textit{de novo} review of the District Court’s conclusion on the Group of 500.\textsuperscript{100} It reasoned that since there was no dispute regarding factual findings, the question was whether the District Court had applied the proper legal standard to those facts.\textsuperscript{101}

The Court agreed with United that the RLA clearly and specifically defined employee. It relied on a plain meaning statutory construction and held that the RLA definition excluded giving the Group of 500 employee status.\textsuperscript{102} The Group of 500 were "not seeking to resolve issues which arose during their employment nor (were) they concerned about benefits

\begin{thebibliography}{99}
\bibitem{91} Id. at 34.
\bibitem{92} Id. at 35.
\bibitem{93} 93 F.2d 340, 343 (6th Cir. 1937), \textit{cert. denied}, 303 U.S. 649 (1938).
\bibitem{94} Appellee’s Brief at 35.
\bibitem{95} Supra note 88.
\bibitem{96} Appellee’s Brief at 39.
\bibitem{97} Id. at 38.
\bibitem{98} Id. at 40.
\bibitem{99} Id. at 45-46, n.28.
\bibitem{100} Supra note 3, at 911.
\bibitem{101} Id. at 910.
\bibitem{102} Id. at 912-913.
\end{thebibliography}
which accrued during that period. Rather, they [were] trying to interpret
the RLA broadly so that they [would] be deemed employees even though
they never began working for their alleged employer." 103 Absent a clear
legislative intent to the contrary, the language of the RLA was
conclusive. 104

The Seventh Circuit also rejected ALPA’s argument that requiring the
Group of 500 to cross the picket line was tantamount to an agreement not
to join a labor union. The Court held United was not responsible for disci-
pline imposed by ALPA on its potential members. 105

The Court declined to get to ALPA’s argument that the special em-
ployment terms for the Group of 500 was a violation of the status quo
provision of the RLA. That provision was intended to protect the status
quo of rates of pay, rules and working conditions of “employees.” The
Group of 500 were never employees. 106

C. STRIKE-RELATED REBID

1. UNITED’S ARGUMENT: The strike-related rebid of the airlines
was a lawful exercise by United of its post-exhaustion right to self-help. 107
United pointed out that even under NLRA “cross-overs” could be treated
the same as any other permanent replacements hired by United and al-
lowed to remain in their post-strike jobs. 108 Further, the rebid was the first
step in United’s rebuilding of the airlines. There was a strong business
necessity not only to induce “cross-overs” but also to allow United to
determine which jobs would need filling. 109

United dismissed the District Court’s use of cases interpreting the
NLRA as helpful in determining a carrier’s right to self-help. In doing so,
United distinguished the present case from that of NLRB v. Erie Transis-
tor, 110 in which the Court held that super-seniority so egregiously im-
paired the striking employees’ rights that the harm far outweighed the
employer’s interest in continuing to operate. In that case the non-strikers
were given a 20-year seniority bonus. Here, United argued, the rebidding
pilots did not receive any seniority bonus and, thus, no insulation against
layoffs in the event of a furlough. 111 To allow ALPA the use of its own
economic weapons without a reciprocal right by United to rebuilt the air-


103. Id. at 912.
104. Id. at 913.
105. Id. at 915, n.20.
106. Id. at 917.
107. Appellant’s Brief at 49.
108. Id.
109. Id. at 50.
111. Appellant’s Brief at 53.
line, not only denied United the self-help provision of the RLA, but also interfered with its business judgment as to the best way to run the airline.\footnote{Id. at 52.}

United denied that its actions discriminated against strikers. The bid procedure was as consistent as it could be with United's practices.\footnote{Id. at 16-20. The projected vacancies were advertized and awarded in order of seniority. The bids also did not result in a large number of junior pilots occupying better paying line positions. United pointed out that even before the strike, some eligible pilots failed to bid for higher positions because they preferred their present schedule. Id. at 18.} Further, since the 1981 agreement had by its terms expired, benefits such as seniority rights had also terminated. Therefore, both parties were free to rock the boat.\footnote{Id. at 57-60.}

United's final argument on this issue was that ALPA, because of certain activities, was ineligible for injunctive relief on the question of the rebid because of "unclean hands."\footnote{Appellant's Brief at 60-72. Specifically cited were ALPA's conditioning its contract ratification on a satisfactory back to work agreement for the flight attendants who honored the picket lines; a campaign to discourage travel agents by threats of a strike; and abuse of sick leave.}

2. ALPHA'S ARGUMENT: The award of the bids, which amounted to "super-seniority," was illegal because of its potentially harmful effects on Union membership and activities. The rebid constituted reward for the loyal nonstriker and punishment for the strikers.\footnote{Appellee's Brief at 53.}

United's argument, based on the theory that the rights to the rebid existed because of an expired contract, did not apply. Although all strikers had returned to their pre-strike positions, United still intended to implement the rebids when vacancies arose. Therefore, they constituted a discriminatory award of "super-seniority" during the terms of a new contract.\footnote{Id. at 54-55, n.37.} The issue was not what United could do during the strike, but what it planned to do after the strike was over.\footnote{Id. at 57.}

3. COURT OF APPEALS: The Court of Appeals accepted that it was inevitable during a strike that self-help measures employed by either party would adversely affect the other. The job of the Court, it continued, was to determine "whether the appropriate balance between competing rights was achieved."\footnote{Supra note 3, at 896-897.}

The District Court did not err in relying on cases interpreting the NLRA to conclude that United's rebid was unlawful. In order to be lawful under the RLA, self-help measures had to be shown to be reasonably

\footnotesize{\begin{itemize}
\item \footnote{Id. at 52.}
\item \footnote{Id. at 16-20. The projected vacancies were advertized and awarded in order of seniority. The bids also did not result in a large number of junior pilots occupying better paying line positions. United pointed out that even before the strike, some eligible pilots failed to bid for higher positions because they preferred their present schedule. Id. at 18.}
\item \footnote{Id. at 57-60.}
\item \footnote{Appellant's Brief at 60-72. Specifically cited were ALPA's conditioning its contract ratification on a satisfactory back to work agreement for the flight attendants who honored the picket lines; a campaign to discourage travel agents by threats of a strike; and abuse of sick leave.}
\item \footnote{Appellee's Brief at 53.}
\item \footnote{Id. at 54-55, n.37.}
\item \footnote{Id. at 57.}
\item \footnote{Supra note 3, at 896-897.}
\end{itemize}}
necessary to keep the carrier operating. In this case a business necessity was not shown for the rebid, since during the strike not a single position was filled as a result of it. On the other hand, the rebid did significant harm to the pilots who chose to strike.

To United’s final argument the Court admitted that the Norris-Laguardia Act disallowed injunctive relief to a party with "unclean hands." However, United has produced no convincing evidence that ALPA had not bargained in good faith nor that any of ALPA’s pre-strike activities, cited by United, were unlawful or harmed the airline. Assuming, without deciding, that ALPA’s activities were unlawful, the public interest imperatives of the RLA could "override the Norris-Laguardia Act’s prohibition against granting injunctive relief to a party with ‘unclean hands’."  

D. PERMANENT REPLACEMENT PILOTS AT GUARANTEED SALARIES

1. UNITED’S ARGUMENT: Salary offers to fleet-qualified, permanent replacement pilots were a lawful exercise of self-help and were supported by a legitimate business justification during the strike. These salaries were designed to attract qualified replacements. They were in line with pay scales for comparable experience and training and, therefore, did not disadvantage striking pilots. The salaries, in order to be effective to induce permanent replacement pilots to work during the strike, had to continue in effect after its end. Clearly, United argued, "an inducement is meaningless if it automatically terminated the moment the union chooses to end its strike.”

2. ALPA’S ARGUMENT: United’s "super pay" contract with the permanent replacement pilots violated both the RLA’s requirement to bargain in good faith and its prohibition against discriminatory employer conduct.

United’s duty to bargain in good faith required prior negotiations with ALPA over its decision to offer super-pay rates. Moreover, even assuming, arguendo, a legitimate justification for such inducements, United discriminated against union members when it extended these salaries be-

120. Id. at 898 (citing Florida E. Coast Railway, supra note 50).
121. Id. at 898-899.
123. Supra note 3, at 902-904.
124. Id. at 904.
126. Id. at 52.
127. Id. at 62.
128. Appellee’s Brief at 58.
129. Id. at 58-59.
The permanency of the "super pay" was an ever-present reminder of the rewards for those who chose not to engage in protected activity and severely undermined future collective bargaining negotiations.\(^{131}\)

3. COURT OF APPEALS: There is no question, the Court concluded, that United had the right to hire permanent strike replacements.\(^{132}\) Therefore, ALPA's argument that United's offer to these replacements represented a per se violation of the duty to bargain in good faith was without merit.\(^{133}\) As was acknowledged in Capitol-Husting v. NLRB, "[i]t is settled that this duty does not extend to the terms and conditions of employment for replacements of striking pilots."\(^{134}\)

The Seventh Circuit held that guaranteed salaries did not discriminate against striking pilots. The record showed that the salaries were less than those offered to similarly situated pilots before the strike.\(^{135}\) Under the new contract, striking pilots retained their old positions at their same salaries. The guaranteed salaries had no effect on this. Additionally, guaranteed salaries had an identical effect on non-striking pilots.\(^{136}\)

ALPA's argument that the guaranteed salaries should terminate at the end of the strike was misplaced. The Supreme Court has held that federal law does not preempt a permanent replacement's right to sue an employer to enforce a promise of employment.\(^{137}\) In the present case, therefore, the RLA was not a bar to United's promise of a guaranteed salary to its replacement pilots.\(^{138}\)

IV. COMMENTS AND CONCLUSIONS

Of the three judicial determinations made concerning the unresolved strike-related issues, by far the most controversial was that relating to the status of the Group of 500.

The Seventh Circuit, adhering to a strict statutory interpretation of the RLA definition of employee, held that the Group of 500 had to cross a picket line and physically report to work in order to establish the employer/employee relationship. In doing so it rejected the applicability of an NLRB case, on point, which concluded that a person may become an

\(^{130}\) Id. at 59.
\(^{131}\) Id. at 60.
\(^{132}\) Supra note 3, at 907.
\(^{133}\) Id. at 908.
\(^{134}\) 671 F.2d 237, 246 (7th Cir. 1982).
\(^{135}\) Supra note 3, at 908.
\(^{136}\) Id. at 909.
\(^{138}\) Supra note 3, at 910.
employee, even if he refused to report to work because of a strike. 139

If the reasoning of the Court of Appeals were carried to its logical conclusion, arguably the Group of 500 could have reported to work, immediately thereafter joined the strike, but at that point, have been statutorily protected from employer retaliation for participating in it. Absurd as this result may seem, the Seventh Circuit is not alone in its refusal to borrow from cases interpreting the NLRA where they directly conflict with the plain language of the RLA. The Fourth Circuit has held that such cross-use is appropriate to clear up statutory ambiguity, but is proscribed when "one statute contains a plain provision that the other does not." 140

It is inevitable that the courts will continue to observe their canons of statutory construction so long as the exclusive language of the two acts exists. The solution to such interpretation, therefore, must necessarily be a legislative one. As some observers have noted, the separate development of the RLA and the NLRA grew out of "historical circumstances that are irrelevant in today's world." 141 Given the similar substantive provisions of both acts, perhaps it is time, as another observer noted, that the issue of consolidation of the RLA and the NLRA should be discussed. 142

POSTSCRIPT

ALPA filed a petition for certiorari on the issue of the Group of 500 with the U.S. Supreme Court. The Group of 500 remained as United employees pending the decision. When certiorari was denied 143 ALPA and United met to negotiate the fate of the Group.

The result of the negotiations was a Letter of Agreement signed by ALPA and United on April 3, 1987. United agreed to extend employment offers to the Group of 500 with an adjusted seniority date from May 17, 1985 to November 9, 1985. The significance of this was to make the Group junior to all strike replacement pilots. ALPA agreed never to challenge the agreement in court, before an arbitrator or in future contract negotiations. Each member of the Group who accepted employment was required to sign a release forever discharging ALPA and United from any

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142. Arouca and Perritt, supra note 35, at 166.
Claims or lawsuits relating to the Agreement.¹⁴⁴

Gay M. Burrows
