

## Pricing Systems

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## REGULATORY SYSTEMS

The final system within which passenger transportation operates and interacts is the regulatory. "Regulation" is a very broad term and has many meanings. We will consider regulation from three viewpoints: economic regulation, regulation of the physical aspects of transportation, and regulation by social policy.

Economic regulation in passenger transportation has three facets: control or regulation of price (rates), control of entry of new firms and economic expansion or contraction of existing firms, and control of services from an economic viewpoint. The regulation of the physical aspects of transportation refers to control over the conditions of transportation. Finally, regulation by social policy refers to the negative and positive results of aiding and supporting one means of transportation over another; to transportation as a function as compared to another economic function; to the ownership patterns allowed; to environmental restraints. Each will be analyzed in considerable detail in this chapter.

Additionally, regulation can be direct or indirect. Thus, the economic regulation of transportation is all direct—directly upon the firms supplying the transportation service. Social regulation is all indirect; it affects the economic climate within which transportation operates and the financial conditions under which passenger transportation takes place. The regulation of the physical aspects of transportation is a mixture of direct and indirect. Very often it is direct—as when such things as safety rules are imposed on carriers and private operators. Less often it is indirect—as when it involves "rule of the road" and standard operating procedures.

Finally, it should be noted that a multiplicity of agencies are involved in the regulatory system. Some are well known, others less

well known, but all are organized and operated distinctively. In effect, these agencies are institutions that interact on one another and on transportation in a most complex and sometimes inconsistent manner. Transportation regulation is filled with inconsistent and conflicting rules and regulations enforced by a large group of conflicting and competing regulatory institutions. Indeed, the struggle for consistency and the resolution of conflict is found in all aspects of transportation regulation.

## GOALS OF REGULATION

Before analyzing the three facets of the regulatory system, we should attempt to set forth the general goals of regulation. It is fairly easy to state them, for these goals are intended to accomplish two things: (1) the protection of the public, and (2) the promotion of the best possible system of passenger transportation.

Implementation, however, is considerably more difficult, for the goals contain inherent conflicts. To attain the best possible system of passenger transportation, the carriers and manufacturers must be strong economically. An economically marginal carrier does not produce the best possible service nor does a manufacturer losing money necessarily produce the highest quality of equipment. On the other hand, the public must not be exploited in price or in service. Conflict is apparent. So too with safety and environmental protection. The public demands that its interests be taken into consideration. But safety and environmental controls cost money and their provisions may weaken the financial health of the carrier or the manufacturer. The inherent conflict of the two-part goal is evident.

The result is conflict and countervailing powers, which must somehow be accommodated. This accommodation is usually a compromise and the conflict may be only partly resolved, with the result that the goals of regulation are probably never completely fulfilled. The public is not completely protected nor is the best possible system of passenger transportation attained. Indeed, given the inherent conflict, one could question whether these stated goals could ever be fully attained.

## ECONOMIC REGULATION

As noted earlier, the economic aspect of passenger transportation regulation encompasses three devices of control: price or rate regulation, entry regulation, and regulation of transportation service.

### *Rate Regulation in General*

Passenger transportation has long been regulated in the public interest. Even in medieval times, the cabdriver providing urban transportation was controlled by the sovereign, or by the city within which he operated. Historically, the number of suppliers of passenger transportation has usually been restricted by way of some control over entry, and the charges have been limited in some way. While we will discuss entry controls next, it is well to point out that all three devices of economic control are parts of a system that interacts and is interdependent. Historically, transportation has been organized as a monopoly or near monopoly, and has had its charges or prices controlled by society.

In modern times, in a situation with one or a few firms, the problem becomes one of how a commission or board acting as the sovereign can substitute for the forces of competition. Some administrative device is established to attempt to be a proxy for the marketplace. Society desires the benefits of restricted numbers of suppliers but wishes to protect itself from potential exploitation by the firms it has favored with this limitation. This is the age-old problem of regulation, and it turns on rate control.

In general rate regulation means the control of the prices that for-hire carriers charge. But more specifically, rate regulation encompasses both the "level of rates" and the "rate structure." The first term refers to the earnings of the carrier while the second refers to the specific prices or rates charged. This division of rate regulation has existed for a very long time and involves the two legal and economic concepts of "reasonableness" and "discrimination."

### Rate Level Regulation

The level of rates is related to the reasonableness of the carriers' earnings and charges. By controlling prices, the public controls the carriers' earnings. Prices can be set too high and too low. If they are too high, the public will be exploited and pay unreasonably high prices and the firm will enjoy unusual monopoly earnings. If they are too low, the carrier may be forced to provide service at a loss and ultimately will have his property economically confiscated. The problem of the level of rates and reasonableness is a difficult one.

In the United States, rate regulation goes back to the post-Civil War period and the attempts by some states to regulate the railroad monopolies of that day. In the so-called "granger movement," states established boards to set rail rates, or legislatures set them by statute.<sup>1</sup> While this action was short-lived, it was determined to be a legal and constitutional exercise of state powers in the famous case of *Munn v. Illinois*, 1877.<sup>2</sup> However, the problem of rate level remained and was not legally resolved until the equally famous case of *Smyth v. Ames*, 1898.<sup>3</sup>

In this latter case, the U.S. Supreme Court stated that rates should be established for a regulated firm in such a way as to yield no more than a "fair return on a fair value" of the property committed to public use. In effect, this means that a standard was established for the determination of the level of rates deemed reasonable in all regulated firms.

The long history of the problems of defining what is meant by "fair value" and "fair rate of return" need not delay us here. Obviously, what is "fair" is a matter of judgment. More often than not a court has finally had to arbitrate what was meant by "fair return on a fair value" in a case-by-case method. Fair value can mean original cost or cost of reproduction or a combination of both. Fair return can mean earnings comparable to those of other regulated firms, earnings high enough to attract capital, earnings high enough to compensate for risk, and many other things. The long and interesting history of this problem can be found in most standard textbooks on public utility

<sup>1</sup>The most comprehensive study of this agrarian revolt is found in S.J. Buck, *The Granger Movement* (Cambridge: Harvard University Press, 1913).

<sup>2</sup>94 U.S. 113 (1877).

<sup>3</sup>169 U.S. 466 (1898).

economics and should be consulted by the interested reader.<sup>4</sup>

Suffice it to say at this point that the legal doctrine of fair return on a fair value is the reason that we find in passenger transportation the Interstate Commerce Commission ruling that the railroads may earn up to 6 percent on fair value or the Civil Aeronautics Board determining that airlines may earn 10 to 12 percent and that rates that yield more or less than this are "unreasonable." In effect, these institutions are acting in the ancient role of the sovereign and are determining what level of rates or earnings is fair or reasonable.

It should be noted that the determination of the rate level under the fair return or fair value criterion is theoretically a type of "target" rate level. Legally, if the firm earns over the target, rates will be decreased; if the firm earns less than the target, rates will be increased. In recent times, rather than determining a specific target of any 6 percent, a "zone of reasonableness" approach has been adopted.<sup>5</sup> Hence, rate levels yielding between 10 and 12 percent are not legally unreasonable in the airlines. The "target" becomes a zone of reasonable earnings levels.

It is not expected that each and every year the firms will earn the target return or even the return found in the zone of reasonableness. Further, the legal doctrine is specifically not a guarantee of any sort—it merely means that the regulated firm should have the "opportunity" to reach the target.<sup>6</sup> There is a tendency to apply rate-level earnings control on the "upside"—that is, to decrease rates if earnings exceed the target of reasonableness, and to disregard the target of reasonableness on the "downside"—that is, there is a hesitancy to raise rates when less than a reasonable rate of return is earned. This is not a bit surprising given the fact that in passenger transportation there is considerable competition and substitution potential, as noted previously. If regulatory authorities raised the level of rates to meet the "fair return on fair value" target, it could well mean even lower earnings for a carrier if passengers were induced to use other modes. Also, it is well to note that the legal doctrine of rate-level control is based on the historical fact of monopoly control. However, the

<sup>4</sup>See Martin T. Farris, and Roy J. Sampson, *Public Utilities: Regulation, Management, and Ownership* (Boston: Houghton Mifflin Co., 1973), Chap. 6: "Rate Regulation: Valuation," pp. 79-93, and Chap. 8: "Rate Regulation: Percentage Return," pp. 118-136.

<sup>5</sup>*Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U.S. 575 (1942).

<sup>6</sup>*Public Service Commission of Montana v. Great Northern Utilities Co.*, 289 U.S. 130 (1935).

conditions of monopoly are at best only partly relevant to passenger transportation.

Finally, given the problem of determining what is a fair value and a fair return and given the degrees of competition involved in the industry, some commissions on some modes have used the "operating ratio" approach to rate-level control. The operating ratio is defined as the operating expenses over the operating revenues times 100—that is, an operating ratio of 85 would mean that 85¢ out of every dollar of revenue went for operating expenses. By determining a target operating ratio, say of 92, the commission hopes to avoid the problems inherent in the fair return on a fair value approach. This substitute has been widely used in motor transportation when the carriers are many in number and determination of fair value becomes burdensome. It should be noted that the operating ratio approach is an extremely poor substitute for an already vague level of reasonableness and has many pitfalls inherent in it as well.<sup>7</sup>

In summary, the regulation of the level of rates means determination of the reasonableness of prices. A legal concept has grown up over the years in which the rate level must yield a fair return on a fair value. Much difficulty exists in defining these terms where a specific problem of rates exists. The rate level approach may not act as a guarantee for the firm but is rather an ideal or target to be sought. Since it is based on monopoly control and the industry has many degrees of competition, this approach is far from perfect. The conclusion is that there is considerable difference between the legal world of regulation and the real world of passenger transportation.

### Rate Structure Regulation

Turning now to the other side of rate regulation, the structure of rates is concerned with the economic and legal concept of discrimination. The concept of avoidance of discrimination has the same sort of long legal and economic history as has the concept of reasonableness. Both came out of the common-carrier obligations found in the common law, which we shall discuss directly.

Discrimination implies unequal treatment. It is possible that the schedule of passenger transportation rates could cause unequal treat-

<sup>7</sup>D. Philip Locklin, *Economics of Transportation*, 7th ed. (Homewood, Illinois: Richard D. Irwin, Inc., 1972); pp. 709-712 contain a good review of the argument.

ment for a given city or a given class of passengers or a given geographical point such as a port or an airport. Given the monopolistic or near monopolistic type of organization of transportation firms historically, this type of arbitrary action was to be avoided. Historically, the railroads in this country tended to lower rates to points where they competed with each other and raise rates to destinations where they possessed a monopoly. In effect, they were following the economic theory of rate-making discussed in the previous chapter under "differential pricing." While it was perfectly good economics, it was not equitable to all users and caused great public concern as to discrimination. Public outcry led to a congressional investigation,<sup>8</sup> and when the Supreme Court ruled that the existing state laws had no jurisdiction over discrimination in interstate commerce,<sup>9</sup> Congress acted to regulate interstate commerce in 1887 and prohibited discrimination in the rate structure.<sup>10</sup>

The term discrimination has many meanings and definitions. The legal definition is not always the economic definition, which in turn is not always the social definition, and so forth. The economist defines discrimination in terms of differences in price not reflecting difference in costs. Sometimes the legal definition of price discrimination is similar and sometimes it is not. However, because of these multiple meanings, transportation regulation typically prohibits "undue discrimination" and allows a board or a commission to determine what is "undue." Discrimination can work two ways, of course, both for and against a point or class of passengers. Hence the statutes typically prohibit "unduly preferential or unduly prejudiced rates," and let a commission determine what is meant by "undue," "preferential," and "prejudiced"—subject to judicial review, of course.<sup>11</sup>

It should be clearly understood that rates or price schedules are set forth initially by the carriers. While it is commonly said that the CAB or ICC "makes rates," this is really not the case. The commission or board is given the power to "approve" or "disapprove" rate

<sup>8</sup>Report of the Senate Select Committee on Interstate Commerce, 49th Congress, 1st Session, Senate Report No. 46, 1886; better known as the Cullom Committee Report.

<sup>9</sup>*Wabash, St. Louis and Pacific Railway Co. v. Illinois*, 118 U.S. 557 (1886).

<sup>10</sup>Act to Regulate Commerce 1887, later known as the Interstate Commerce Act.

<sup>11</sup>These terms were originally used in Sec. 3 of the Act to Regulate Commerce—or I.C. Act as it was later known—and have been used again in every statute regulating the other modes of transportation.

schedules—they do not set the prices in the first instance. If the regulatory body finds rates to be unduly discriminatory (or unreasonable when considering rate levels), they may specify what prices or rates they will approve as nondiscriminatory or reasonable. In this instance and only in this instance does the administrative commission actually set the rate.

While the distinction noted here may seem to be minor and somewhat burdened with legal niceties, it is in fact an important distinction. In spite of what the headlines say about the CAB setting rates or in spite of the oft-heard complaint by carrier personnel that the ICC sets rates too low (or too high), it is up to the carrier to set his rates as he sees fit, given the demand and cost as he perceives them. The regulatory authority then either approves or disapproves of the carrier's proposal. A great deal more innovation in pricing or rate-making might be approved if the carrier would only try or propose it. This was implied in the chapter on pricing. But, as also noted in that discussion, it is sometimes the path of least resistance on the carrier's part to compete on a basis other than price and to shift the blame to the convenient regulatory board.

In actual practice, it is more often than not a competitive carrier who resists and offers a complaint to price or rate innovation. While cities sometimes protest discrimination before regulatory groups, it is the carriers who are most alert to changes in the rate structure of their competitors.<sup>12</sup> If the case alleging discrimination has merit, the commission or board must specify what they consider nondiscriminatory. It is for this reason that one finds the CAB specifying that the differential between coach and first-class air fares must be at least 25 percent, concerning themselves with the degree of discount given to travelers under 25, or the degree of discount offered to travelers in the armed services, and so forth. These are examples of potential discrimination.

In summary, rate-structure regulation concerns potential preferential or prejudicial treatment. Under the law, this must be "undue discrimination" and a commission or other regulatory institution is given the authority to determine the meaning of this term subject

<sup>12</sup>For an interesting and in-depth analysis of the efforts of competitive air carriers and the role of the CAB in passenger fares up to 1969, see William E. Fruhan, Jr., *The Fight for Competitive Advantage: A Study of the United States Domestic Trunk Air Carriers* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1972), pp. 69-109.

to judicial review. Actual prices are originally determined by the carriers and only approved or disapproved by the regulatory authorities. The parties most frequently protesting discrimination are not the passengers but rather competitive carriers. Once undue preference or prejudice has been found, the regulatory authority can specify the exact rate that removes the discrimination alleged.

### *Entry Regulation*

The second device of economic regulation is the control of entry of new carriers and the change in the operating structure of existing carriers. This device is obviously interrelated with the other two devices of rate control and regulation of service. Indeed, historically it was the granting of monopoly or near-monopoly status that led to the need for rate structure and rate-level control.

Basically, the question involved here is: How many carriers shall be allowed to compete on a given route or in a given area? Too much competition between carriers can be just as bad as too little. The financial health of the carrier and the need of the public to be served are two sometimes conflicting criteria that must be weighed in these entry decisions.

Two regulatory devices have been used historically to control entry: the franchise, and the certificate of public convenience and necessity. The franchise has been used to control entry on the city streets, alleys, and byways and is typically issued by the city council to a bus, street-railway, or rapid transit system. While most franchises are "exclusive," that is, guaranteeing only one firm, they are not all so, and several firms sometimes have franchises to serve a given area or city. However, the number of possible firms is limited by the potential inconvenience to the public of too many vehicles on a street irrespective of potential bankruptcy due to excessive competition.

The Certificate of Public Convenience and Necessity is typically issued by a regulatory board or commission such as the ICC or CAB where intercity transportation is involved. While there are potential space limitations, and such facilities as airports, train stations, and ports can become overcrowded, it is more a matter of the economic competition that is involved. Once more the problem is balancing out the public's need for service with the need to maintain an economically sound carrier.

It is not an easy task to decide how many carriers should be allowed to serve on the city street or on an airway or highway. Under some conditions it may be necessary to decide if service should exist at all, for example in urban transportation. But once the decision as to "how many" has been made, the equally difficult decision as to "which carrier" is also involved. Because the public must be served, there is a distinct tendency to favor existing carriers over new carriers.

Further, this tendency has been reinforced by the regulatory statutes. It must be remembered that at one time almost all areas of operation were unregulated as to entry. As each geographic area or economic area (such as motor carriers or air carriers) was brought under regulation, the problem of what to do about the existing carriers had to be faced. Typically, a "grandfather clause" was used to solve this problem.

This provision allowed the existing carriers to continue to operate in the same manner as they had been operating on or near the date of regulation as "a matter of right." That is, the existing carriers were not required to show that their operation was necessary or that it served a public need. These carriers are sometimes called "grandfather carriers" and often refer to these privileges as "rights." The operating authority is, however, a privilege under the law, not a "right" such as the right to vote or right of peaceful assembly, and as a privilege can be revoked for just cause. It is common in transportation, however, to speak of "operating rights."

All new carriers and proposals for any changes in the existing carriers' operations had to show that "public convenience" would be served and that a "necessity" for the service existed. Hence the term "certificate of public convenience and necessity." Once the need was established, the entrant had to show that this need could be adequately served by proving it was "fit, willing, and able" to serve under the law. This applied to new carriers as well as to changes in the operating rights of existing carriers.<sup>13</sup> While the terms "fit, willing, and able" are subject to interpretation and are difficult to specifically define,

<sup>13</sup>In the case of the domestic airlines, the CAB decided early not to allow additional firms to enter the industry. Specifically they stated in the Delta Air Corporation case:

The number of air carriers now operating appears sufficient to insure against monopoly in respect to the average new route case. . . In the absence of particular circumstances presenting an affirmative reason for a new carrier there appears to be no inherent desirability of increasing the present number of carriers merely for the purpose of numerically enlarging the industry. 2 CAB 447, 480 (1941).

they generally refer to past operating experience that demonstrates ability, financial fitness and soundness (with emphasis on past financial history), and operating equipment and organization (once more based on past operations). In all cases, it is rather difficult for a new carrier to demonstrate it is "fit, willing and able," particularly since much of the interpretation of the terms turns on experience or past operation. It is much easier for existing carriers to "extend" their operations into a new territory and develop as demand grows than for new carriers to enter a market under regulatory statutes.

The obvious result of the use of certificates of public convenience and necessity, plus the grandfather clause, plus the requirement of being "fit, willing and able," plus regulatory policy, is that competition in the sense of new carriers is severely controlled. There is a definite preference for existing firms and it is almost impossible for new ones to enter the transportation market. Empirical investigation shows that in air, bus, and rail passenger transportation, the existing firms have continued since the time of regulation (grandfather carriers) and have expanded and changed as the market has expanded and changed. Very few new firms have begun under regulation.

Given these regulatory conditions, the matter of competition turns mostly on expanding the route pattern of passenger transportation carriers. Regulatory authorities can and do allow competition by certificating existing carriers on routes already served; indeed, the awarding of competitive routes is the major way in which most competition in passenger transportation comes about.<sup>14</sup> Route certification is a very powerful tool of control, especially in air transportation, and its use has been subject to considerable criticism.<sup>15</sup>

Additionally, as part of entry controls (as well as financial controls) of carriers, all mergers have to be approved. The concept was originally found in the Transportation Act of 1920, which dealt mainly with railroads, and which was based on the idea that the carrier might endanger itself financially by undue expansion via mergers and consolidations, thus impairing its ability to serve. The

<sup>14</sup>Samuel B. Richmond, *Regulation and Competition in Air Transportation* (New York: Columbia University Press, 1961), Chap. 5: "Methods for Creating and Controlling Competition," pp. 62-97, and Chap. 6: "The Policy of the Civil Aeronautics Board Toward Competition," pp. 98-100, and Fruhan, *The Fight for Competitive Advantage*, pp. 110-123.

<sup>15</sup>Richard Caves, "Performance, Structure, and the Goals of Civil Aeronautics Board Regulation," *The Crisis of the Regulatory Commission*, Paul W. MacAvoy, ed. (New York: W. W. Norton and Company, Inc., 1970), pp. 131-151 and Fruhan, *Ibid*.



idea was that regulation should promote economically strong carriers in order to assure good service. Control over mergers was incorporated in each act subsequent to the 1920 act as the newer modes of transportation were regulated.

In addition to the original rationale, it should be realized that if mergers were not controlled, the carrier could subvert the regulation of entry and routes by simply taking over existing firms. Merger controls and certificates of public convenience and necessity are mutually interdependent regulatory devices. However, the result of this logic is firmer control of entry and the pattern of competition, not simply regulation of new entrants.

Finally, there are many possible patterns of competition in passenger transportation. The public itself may choose to provide the service through a municipally owned carrier such as a city bus line. The publicly owned carrier may compete with a privately owned for-hire carrier. Additionally, private passenger transportation via the personal automobile probably will always exist and compete with both public and for-hire carriers. We will return to the important matter of financial support for publicly owned transportation and subsidy of for-hire transportation under social regulation. Suffice it to say for now that the control of entry into the passenger transportation market is not absolute and that various patterns of existing and potential competition exist.

### *Service Regulation*

The final device of economic regulation is the control over the level of service of the carriers. This aspect of regulation, although less well known than price and entry control, is equally a part of and is interrelated with price and entry regulation as a "system" of economic regulation.

From a philosophical viewpoint, the goal of regulation in this area is to see that the public is offered good service. Economically, service regulation must accompany price and entry regulation because, when a monopoly or near monopoly is granted and prices are set, there may be a natural tendency on the part of the firm to maximize by decreasing the quality and level of service. Once a carrier is granted the "right" to operate exclusively, the natural stimulus of competition is removed. The whole point of service regulation is to substitute

administrative action for the stimulus of the impersonal marketplace—with its financial rewards for good service.

Service regulation is a very old concept, and the natural tendency to have deteriorating service levels once entry is controlled has existed almost as long as regulation itself. Historically, this problem was solved by imposing a series of "rights and duties" on the carrier or regulated firm by the sovereign. Thus, in exchange for the "right" to operate exclusively, the regulated firm assumed four duties: the duty to serve, the duty to deliver, the duty to avoid discrimination, and the duty to charge only reasonable prices. Later, these "duties" became part of the "common law" or the doctrine of "common callings" and were uniformly recognized as part of the fabric of regulation.<sup>16</sup>

While the four "common law duties" (sometimes called "common carrier obligations") dealt mainly with freight carriers, at least three of them apply equally to passenger transportation. The "duty to serve" means that the regulated firm must serve all comers, that it may not limit its "public" except for due cause and unless physically limited in some way. Hence, an airline must sell tickets to travelers and may not refuse to serve a given group, nor may it otherwise pick and choose its customers. Likewise, once given the right to serve a point, a carrier may not abandon its service without permission.

The "duty to avoid discrimination" and the "duty to charge reasonable prices" have been formalized in rate control as noted previously. Discrimination here refers both to price discrimination and service discrimination (both preferential and prejudicial) between points and between classes of passengers. Reasonableness as used here refers to both the rate level and the rate structure, as previously noted, and in general means that a carrier may not exploit its monopoly privilege. In both these "duties," an administrative commission has been granted the task of interpreting the meaning of the terms, subject to court review, and establishing rules and regulations to see that those duties are fulfilled. The "duty to deliver" refers to freight and concerns delivery to the proper consignee with dispatch and in the same physical condition as originally tendered to the carrier.

In passenger transportation, the "duty to serve" is perhaps the most important of the four common carrier obligations. Once oper-

<sup>16</sup>Roy J. Sampson, and Martin T. Farris, *Domestic Transportation: Practice, Theory and Policy*, 3rd ed. (Boston: Houghton Mifflin Co., 1975), Chap. 7, "Legal Service Obligations," pp. 109-120.



ating authority to serve a point has been granted, the carrier must continue to serve and must carry all passengers. In the words of the law, the carrier must "hold himself out to serve all comers." Planes must fly, trains must operate, and buses must roll to fulfill this basic type of service regulation and retain the right to a franchise or a certificate.

It should be pointed out, however, that the "extent of service" is usually not closely regulated. By "extent of service," we mean simply: "How often?" Certainly a minimum of service exists—a train once a week, say, or a plane once a day—to fulfill this duty, but until recently there has been little concern beyond this minimum. In recent times, however, there has been concern with both the minimum and maximum extent of service.

Prior to Amtrak, the ICC and state regulatory commissions were involved in trying to ascertain what minimum level of rail passenger service was necessary in order to properly serve the public. Likewise, the CAB has been concerned over the continuation of air passenger service to small communities and the fact that the "duty to serve" may impose a substantial financial and operating burden on the carrier where points of small traffic generation are involved.<sup>17</sup> This becomes a difficult problem where the carrier, such as a regional or feeder airline, is subsidized by public revenues. One attempt to solve this problem was the so-called "use it or lose it" rule in the late 1950s, whereby a small city had to generate a minimum of deplaning or enplaning passengers per day or it would lose its service.<sup>18</sup> Additionally, there have been some attempts to connect earnings regulation to minimum service levels. On some occasions the CAB has indicated that it would allow a carrier a certain percentage return only if it served its territory a specified number of times per week or month.

<sup>17</sup>While abandonment of service is not possible, a substitution of another carrier to fulfill this obligation or the substitution of another type of service (bus for rail—regional airline for trunk airline) is an alternative. For an interesting discussion of substitute service in air transportation, see Virgil D. Cover, "The Rise of Third Level Air Carriers," *Transportation Journal* (Fall 1971), pp. 41-51.

<sup>18</sup>When the local-service airlines were granted permanent certificates of public necessity (in response to a Congressional amendment to the basic 1935 Act in 1955), the CAB decided that an intermediate point must show an average of at least five passengers a day emplaned over a test period in order to warrant authorization of permanent service. 28 CAB 680, 752 (1958). Enforcement of this policy in the 1960s led to deletion of service to a number of smaller cities.

Until recently, there has been little concern with the maximum levels of service. The assumption has been that the carriers would follow the profit motive and would not serve more often than was necessary in their own self-interest. In the late 1960s and early 1970s, however, some control of maximum levels of service has occurred.

The rationale for this was that the competitive nature of some markets, particularly in air transportation, forced the carrier to serve more frequently than necessary, and some markets had become "oversaturated." No single carrier could cut back the frequency of service without losing a substantial share of a given market and the earnings of all carriers were unduly depressed due to "too much competition." Hence, in the depressed earnings conditions of the airlines in the early 1970s, the CAB was forced to concern itself with petitions to decrease the number of flights and was under pressure to control the maximum level of service. As an experiment, the CAB allowed the three largest domestic air carriers (United, American, and TWA) to get together with a view to decreasing the number of flights coast to coast. The idea was to help the airlines financially since the intensity of competition had forced the carriers to offer duplicating flights, many of which were being flown with very low load factors. It was generally agreed that the experiment was a success and it was extended several times.

These experiments, plus considerable research by regulatory authorities as well as by the Department of Transportation, point up the fact that the level of service is but a part of the overall system of regulation. Indeed, it is difficult to consider earnings or rate control in isolation without considering service levels and entry control. This is particularly true of air transportation.<sup>19</sup>

Another control over maximum levels of service came in late 1973 with the energy crisis. As fuel shortages became severe due to Middle East hostilities as well as to the "shortfall" of supply over demand, the CAB allowed all the air carriers to meet and collectively adjust the number of flights. This action was part of the national effort to control the use of energy and bring demand down to meet available supply. Many schedules were canceled and the frequency of service was curtailed in all of passenger transportation including buses and trains. However, as noted in the previous chapter on pricing, it is

<sup>19</sup>George W. Douglas and James C. Miller, III, "Quality Competition, Industry Equilibrium, and Efficiency in the Price-Constrained Airline Market," *American Economic Review* (September 1974), pp. 657-669.

not unusual for carriers and private automobiles to operate with excess capacity—often with less than half the seats occupied. It was possible, therefore, to sometimes decrease the frequency of service to conserve fuel while still maintaining the level of service by consolidating two duplicating half-full flights into one full one. The same remarks apply to car pools for private automobiles and consolidated bus and train schedules.

Finally, there has been little concern with the “condition of service” until recently. By the term “condition of service” we mean the physical condition of equipment, the comfort of the passenger, and the general environment within which the service was rendered. Once more the assumption was made that the carrier would render some minimum standard of service in order to meet competition in the marketplace. If the condition of service was inferior, the passenger would simply shift to another carrier or another mode—that is, intermodal and intramodal competition and elasticity could be relied on to regulate the condition of service.

This position fails to recognize the interrelated nature of the regulatory system. Poor conditions of service can exist, especially where monopoly privilege is found and it is not possible for all passengers to shift to other modes. Likewise, the conditions of service can become a vehicle of discrimination against points or classes of customers as well as a competitive tool to assure a large share of the market.

To make rate and entry regulation effective, conditions of service, as well as extent of service, may have to be controlled. Recognition of this necessity to control service in a comprehensive manner (both minimum and maximum) has come slowly and reluctantly to regulatory boards and commissions. Prior to Amtrak, the ICC grappled reluctantly with the problem of poor passenger train service. The problem was not just seeing that the trains ran but the physical condition of the equipment, the quality of the meals, the “on-time” performance of service and so forth.<sup>20</sup> Likewise, as it considered the general level of air fares, the CAB has recently become concerned with seating configuration, meals served, free drinks, private clubs for preferred passengers, pitch of seats, leg room, and a whole host of matters relating to condition of service.<sup>21</sup> Both of these problem areas

<sup>20</sup> *Adequacy—Passenger Service—Southern Pacific Co. between California and Louisiana*, 335 ICC 415 (1969).

<sup>21</sup> *Domestic Passenger Fare Investigation, 1971*.

of recent concern are examples of the fact that once entry is controlled and price regulated, the third aspect of service must also be regulation.

### *Consistency*

It is fairly obvious that the three devices of economic regulation, price, entry, and service regulation, are a whole “package,” or a system of interrelated controls. It is sometimes difficult to regulate one without affecting another. A cut in rates may mean a cut in frequency of service or the quality of service, a raise in rates to meet a desired revenue level may cause discrimination and preference. Too many carriers in a given market can lead to economic chaos for all if wasteful service levels are not controlled or frequency of service becomes too great. All sorts of compromises and trade-offs are necessary and the whole system of economic regulation must be considered as a whole—not as individual regulatory devices.

Unfortunately, economic regulation has not always been consistent. Rates have been raised or lowered without concern over regulation of services; entry has been allowed with little recognition of its effects on earnings or on service; inconsistency in regulation has abounded. Much of this inconsistency arises from the failure to realize that economic regulation is a system of three interrelated and quite complicated devices.

Inconsistency in the application of economic regulation of for-hire passenger transportation is matched by inconsistency in the pattern of providing and controlling passenger transportation. As we shall discuss shortly, all modes are not regulated equally, and some modes, such as private passenger transportation, are not regulated at all (economically). Publicly owned transportation is controlled by different groups than those regulating for-hire passenger transportation even though they compete, which may lead to inconsistency. For instance, Amtrak and Greyhound compete on intercity travel and the level of rates of one will greatly affect the demand for the other. Yet the rates on Amtrak are set by a quasi-governmental board which has little or no concern with the effect on Greyhound, and the ICC in approving Greyhound rates is relatively unconcerned with the success or failure of Amtrak. Further, public transportation, such as rapid transit systems and city bus lines, may be subsidized by revenues collected in part from the users of for-hire transportation, and so

forth. While consistency for its own sake is not sacred, it is possible to say that inconsistency seems to be a predominant factor in the economic regulation of passenger transportation.

### *Direct Regulation*

Finally, it is well to note that the system of economic regulation is imposed directly on the for-hire carriers. Some board or commission, such as the CAB, ICC, or FMC, imposes these controls directly. In public transportation the action of a city council, public authority, or public board or commission, in effect imposes the same three devices of the economic regulatory system upon the passenger transportation system as well. While regulation and control of the for-hire carrier and the public transportation system may be clothed in a legal framework, its effect is directly economic. The carriers must live in this regulatory environment and system, for the public has come to expect it in pursuit of the two general goals of (1) protecting the public, and (2) promoting the best possible system of passenger transportation.

After discussing the regulation of the physical aspects of transportation and social regulation, we shall be concerned briefly with the various agencies imposing these controls.

## REGULATION OF THE PHYSICAL ASPECT OF TRANSPORTATION

The second aspect or type of control in the regulatory system concerns the physical aspects of passenger transportation. In general, these are regulations imposed on the conditions of transportation, both by society as a whole and, in some instances, the industry itself.

The term "regulation" as used here may be somewhat different from "regulation" in the above section on economic regulation. All systems must have ground rules—"rules of the road," so to speak. Some structure of operating procedures is necessary for an ordered and efficient society. Many of these ground rules or rules of the road or operating procedures are called "regulations"—but irrespective of what they are called, they serve the same function of establishing

order and relative operating efficiency in the daily life of society. Yet, as is the case with specific economic regulation, these rules of the road restrict and impinge upon the freedom of the individual whether he be operator-owner, a for-hire firm, or a publicly owned passenger transportation system. In this sense they are "regulations" just as surely as the actions of an administrative commission or board are "regulations."

Everyone lives with a whole series of restrictions upon his individual freedom and choice. Passenger transportation is no exception. Restrictions have always been present and probably always will be. It is well to remember that when man came down out of the trees he had to set up ground rules!

### *Objectives of Physical Regulation*

Applying these general remarks to passenger transportation, it is possible to note that two rather specific interrelated objectives seem to be at the base of all this regulation of the physical aspects of transportation. These are safety on the one hand and reliability on the other.

Perhaps the most important objective of physical regulation is the safety of the user and the co-user of the highway, airway, street, railway, ocean shipping lane, or whatever. Society acts to protect its members from physical danger, of course, but in addition to safety it wants a reliable passenger system. Many rules are imposed with the idea that not only will the public be served in a safe manner but that it will be served when it demands service and with some assurance that a journey, once stated, will be completed. While the objective of reliability might be thought of as economic, and indeed is involved in two of the economic regulatory devices of control of entry and control of service, we are concerned here with physical reliability. The close connection between physical reliability and economic reliability only illustrates once more that rules are interconnected and interrelated—a system of regulation exists.

Finally, it should be noted that the objectives of safety and reliability fit nicely into the general goals of the regulatory system noted above: protection of the public, and promoting the best possible system of transportation.