

Monitoring the Motor Carrier Act

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Now that the Motor Carrier Act of 1980 has been enacted, its effects on motor carriers and society must be monitored. Five major areas of the monitoring process are discussed. They include (a) the purpose for monitoring, (b) the clear definition of the act's provisions, (c) the act's possible unintended effects, (d) the points and standards of the provisions to be monitored, and (e) the societal benefits and disbenefits of the act. Monitoring is needed to ensure that congressional intent is carried out with integrity and accuracy by the monitoring agencies.

This paper is a continuation of an earlier article (1) that dealt with the deregulation of motor carriers. While significant reform of motor carrier rate and entry regulations was desirable, too little was done by the U.S. Congress in the Motor Carrier Act of 1980 in some areas and too much in others. Now is the time to stand back and monitor the act.

There are five key issues that should be dealt with by those responsible for the accuracy and the integrity of monitoring the Motor Carrier Act. These five issues are listed below and expanded on in the body of the paper:

1. Purpose of monitoring,
2. Clear definition of the provisions of the act that are to be monitored and clear articulation of the intentions underlying the skeletal phrases included in the act,
3. The need to take into account unintended effects,
4. Specification of the monitoring points to be evaluated and the standards by which they are to be judged, and
5. Separation of resultant conditions into those that are and are not attributable to specific reforms.

PURPOSE OF MONITORING

The "why monitor?" issue might be responded to simply by saying "to determine if the intent of Congress is being achieved by the implementation of the provisions of the act." Also, since the future of collective ratemaking is, in part, dependent on carrier performance in the rate area, special monitoring provisions have been made for scrutinizing rates and ratemaking practices under the new act.

The act requires that Congress annually conduct oversight hearings for at least five years (until 1985) "to ensure that this Act is being implemented according to congressional intent and purpose." While this minimum time frame should be enough to indicate long-term effects of the act, certain critical transportation variables should be monitored as long as motor carrier regulation exists in order to ensure flexibility.

This latter point--to ensure flexibility--must be the crucial purpose of the monitoring mandated by the act. Some members of Congress were uncertain whether some effects of the act would be desirable, and their support apparently depended on their legislated scrutiny, with the possibility of revisions being made to the act if desirable expectations are judged not to have been met. A further purpose of requiring review is to avoid the distasteful results of the survival of the Motor Carrier Act of 1935, as amended, well past the usefulness of many of its provisions. For that reason monitoring should be retained well into the future.

PROVISIONS AND INTENTIONS

The second issue, regarding the provisions and intentions of the act, requires not merely a reading and comprehension of the act itself but also should include the record created by Congress in developing the provisions. Intentions underlying the phrases in the act are included in transcripts of House and Senate committee hearings and also the congressional debates before passage of the act. The record gives greater dimension to the summary nature of the act. Thus, those who monitor the act will be able to focus attention on the right issues and adopt a responsible approach to the task by doing a faithful reading of its underlying intentions.

Of clear concern to Congress, emphasized in the act itself and elsewhere, is that the Interstate Commerce Commission (ICC) should not exceed or deviate in any way from the regulatory authority granted it by Congress. This apparently is a valid concern. The ICC, as constituted during 1980 and (so far) in 1981, gives convincing evidence that it intends to interpret the act in as deregulatory a way as possible. If this expectation proves to be true, it seems to me that responsible monitoring would reveal behavior contrary to the clear intent of the statute.

The act and the record are repetitious in regard to service to small communities. A special study on the issue is mandated by Congress. Small communities are also singled out for attention in the motor carrier ratemaking study. The record made by Congress in the course of developing and voting on the legislation reveals substantial debate on this topic.

Most study on the small-community subject, to date, has conformed to the doctrinaire approach that has set out to prove either that service would be improved, or even if it is not (i.e., if service cannot be economically supported), the community should not be served. While those may be reasonable economic arguments, it seems to me that Congress has spoken otherwise. Services to small communities are to be maintained--and one assumes that that means a level of service at rates that will allow the communities to remain, or become, economically viable in the market.

Monitoring means observing, projecting, and reporting, and maybe also recommending, but not judging and prescribing. All that is required from the monitor is the answer to the questions: What is the status of service to, for example, small communities? and Based on what is observed, what can be anticipated? Policymakers will decide if what is occurring is acceptable and, if not, what should be done. The monitor may indicate what he or she believes the displacement or opportunity costs of the alternatives to be, but only Congress can decide whether the results are acceptable or not and what adjustments will be made. The law says that carriers shall provide and maintain service to small shippers and that greater participation by minorities will be promoted.

The principal, overriding goal of the act is the enhancement of competition in the motor carrier transportation field so that higher levels of economic efficiency can be attained. This goal, in conjunction with extra-economic goals, sounds like a setup for a demonstration of a mathematical program

with a cost-minimization objective function subject to output and quality constraints. So be it. Efficiency, Congress is saying, is not all that is being sought. Monitoring should measure efficiency and other goals free of judgmental bias.

UNINTENDED EFFECTS

The third issue, the matter of unintended effects, is raised to caution us that while the act is intended to have impact on the conditions under which Interstate highway freight moves, the results of the legislation may "spill out" into other areas. The spill out may be not only unintended but undesirable. This concept does not include such events as the bankruptcy of a carrier or the closing of now mislocated distribution facilities. The new policies accept the risk of negative (not necessarily intended) outcomes as being conditions under which Interstate highway freight moves. Such negative effects merely enter into the other side of the ledger in calculating net social benefits (costs) of the new motor carrier policy.

Some of the unintended effects that should be considered in a broad, responsible study of the consequences of the new policy are (a) impacts on intrastate transportation services (and the resulting effects on interstate movements of traffic), (b) implications for other transportation modes, (c) correlation with highway safety conditions, (d) effects on road congestion and highway adequacy, and (f) significance of any restructuring of the industry that affects suppliers to the transportation and physical distribution sector. If such effects exist and are large, they could reverse a positive net benefit calculation figured by using only intended effects.

Some of these issues, such as safety and effects on intrastate transportation, were brought up in the debate that preceded congressional action. They were largely disregarded. Best the effects should be detected early, traced back to the policy changes responsible, and corrected. I speak here not of the efficiency-improving shifts that occur when conditions that affect an industry (or one of its segments) change. Rather, the reference is to the interim distortions and to the ultimate economic and social distortions that may occur as a result of those changes.

The final effect concerns the need for identifying the degree of connection between observed conditions at monitoring points and regulatory policies changed by the act.

Will we, for example, be able to claim success for limitations on rate bureaus or for the zone-of-rate freedom because of broad reductions in rates during the last half of 1980 and for 1981? How much would rates have fallen because of ICC rate policies already in effect? How much on the condition of the economy? If a flurry of bankruptcies occur or are threatened, or if widespread service complaints swamp congressional offices, is it due to the act, interest rates, long-evolving ICC entry policy, or ignored enforcement responsibilities at the ICC? If highway accidents involving large trucks increase, can we trace the responsibility to the removal of or failure to enforce the 55-mph speed limit, to small truck operator earnings due to the recession, or to more owner-operator or private carrier participation because of the act? Perhaps the condition is the responsibility of the ICC or the U.S. Department of Transportation because of their failures to develop and apply adequate and acceptable fitness standards.

MONITORING POINTS AND STANDARDS

The fourth issue is the dual one of selecting monitoring points and standards. That is, what kind of

events (carrier rates, market prices, service quality, and so forth) are being observed, what transportation entities (carriers, regions, shippers, and so forth) are being measured, and what kinds of measures are being applied. Whether a particular provision of the act is working or not is not necessarily an objective determination but may depend on which of many possible condition variables that result from implementation of provisions of the act is being observed. Further, the judgment will be affected by the grading system used by the monitor. For example, if a result is the same as that under the old provision, should the reform be considered successful? If the result must be "better", how much better? Should that measure be generated as a result of randomized statistical processes, thus establishing the validity of the measure?

Of overriding importance in this respect is the definition of the purpose of the new regulatory reform provisions in as specific terms as possible. That definition will focus the monitoring effort on the correct subjects. This will, of course, require the monitoring organization to penetrate the intent of Congress. This effort includes getting a fix on the standards Congress infers should be applied to events and conditions. The difficulty of interpreting definitive goals of Congress' action and of identifying measures reflecting Congress' intentions cannot be overemphasized. At the same time, the attempt to develop this basis must be made. Otherwise, monitoring results will be empty or, worse, will reflect to predilections of the monitor. Such a monitoring effort could lead to actions (or inactions) that would fail to gain the maximal net social benefit from the reforms.

The act's passage was made possible by public dislike of bureaucratic intrusion into business decisions and was nurtured by both valid and fatuous economic efficiency arguments. Nonetheless, Congress is, in the long run, going to be looking at perceived net social gains, not merely efficiency gains. This distinction is drawn to call attention to the view that the electorate (at least those who influence legislation) will forget how distasteful government intervention was if advantages or conditions enjoyed under regulation are seen as being lost under the newly prescribed set of reforms. Those committed to deregulation would attempt to hold off revisionists by pointing to whatever efficiency gains can be demonstrated. The revisionists, if they were to perceive that the negative social and economic consequences of the act were great enough, would attempt to seek reforms that would restore the prior conditions.

In fact, as discussed earlier, the act indicates that Congress was not seeking economic efficiency alone. Congress can be thought of as having taken the action to improve the net social benefits of conditions relating to truck transportation. The route chosen places much greater reliance on the free market than had existed under earlier regulatory conditions.

For these reasons, the monitoring effort should look at more than the manifestations of simple efficiency, rates related to cost, increased carrier market entry and departure, higher load factors, lower rates, fewer empty miles, and lower variance in carriers' profits with the norm near the carriers' cost of capital. As a matter of fact, because most of these monitoring points relate to carriers and only indirectly to the market for transportation services, examining them alone would tell us nothing at all about efficiency. These conditions tell much less about net social benefits. They would merely provide a narrow look at one of the foundations of the economic structure

that Congress was seeking to improve with no insight at all into external effects. We merely assume that if the readings on carrier structure and performance appear to be "good", the economic system will be enhanced.

Would the problem of judging the full effects of the act be solved if the price and quality of service available to shippers were examined? This comes closer but, still, performance at the physical distribution level is merely suggestive of overall economic efficiency and is unrelated to societal questions. Nor do rates and service, or transportation costs for that matter, indicate system efficiency. Few among us fail to recognize that total costs of distribution may diverge significantly from mere transportation costs. The underlying transportation system merely affects user inventory costs, customer service levels, marketing practices and costs, and so forth.

The critical place to observe the effects of the act are at the production, distribution, and consumption levels. If we emphasize the fact that transportation and physical distribution have no function but to facilitate the factor and product markets, we see that the thing to measure is the change in the ways that factor and product markets function. How flexible, responsible, progressive, capable, and efficient the transportation and physical distribution systems are will show up as improved access to supply sources and product markets, as an improved array of products available in markets, and, generally, at lower price levels and more stable prices.

RESULTING SOCIAL CONSEQUENCES

The societal consequences associated with freight transportation can be identified as those conditions that, while they result from the conduct of transportation services, are inadequately or not at all accommodated by the market system. Some of these societal effects have nearly universal impact. Others have a narrower group or geographic focus. Examples of the former type of effect that could be linked to the new policies are roadway congestion, highway safety, and road deterioration. An example of a group exposed to potential societal effects is the group composed of small shippers. A geographic effect, not surprisingly, could be imposed on a port; a remote, small community; or a particular region of the nation.

Analytically, the similarity between the universal and the group or geographic societal effects is that those that are negatively affected may prefer a higher-quality result than will be provided by the production and use of highway freight services in the more nearly free market environment. The act has placed faith in the market system, perhaps properly so. Monitoring the societal effects should provide advance notice of important divergences from these sanguine expectations and allow trouble spots to be corrected.

Probably the most difficult type of monitoring to do is that dealing with the functioning of product markets. Production technology, financial institutions, fiscal policies, and general economic conditions are among the economic variables that, along with transportation, affect market performance. Sorting out and measuring the causal influences and specifying the effects attributable to new rules affecting motor carriers are probably impossible. We need surrogate monitoring points, so we must retreat to studying carrier performance and the functioning of the elements of physical distribution for firms and industries as indicators (note, only indicators) of changes in broader economic ef-

iciency. Monitoring of societal effects can, it seems to me, be done directly.

In doing the job of monitoring the evolving effects of the act on carriers and on physical distribution, it is crucial that those designing and evaluating the effort be thoroughly aware of the characteristics of the industries and industry segments being monitored. The production technologies, markets, sensitivity to external influences, and financial structures of each group studied must be fully understood so that impacts can be understood. Trucks are not merely marginal costs with wheels any more than airplanes are marginal costs with wings.

Those of you familiar with the Report of the Motor Carrier Task Force (2) will recall that the reforms recommended for specialized carriers were supported by industry studies of the carriers and their markets. The expectations under significant reforms were related to the characteristics of the carriers and their markets providing a basis for monitoring. That is, the analyst would have specific elements to observe and would be able to compare the projected outcome with that which was observed.

About the time that the task force was dealing with the general freight carriers, I arranged visits for its members and ICC staff to various general commodities carriers. Clearly, the people who saw the trucks, freight, truckers, and freight terminals received a different perspective than when motor carriers were abstractions that existed only in regulations, opinions, and orders of the ICC. It is hoped that monitoring will not be carried forward to points as remote from reality as were the regulation and the reform of those regulations. In the proceedings on the subject of motor carrier regulation, I wrote that "more needs to be done to understand the motor carrier industry, its tendencies, its markets, its (likely) responses to regulation and to regulatory change" (1, p. 360). In writing the report of the Motor Carrier Task Force (2), I said again that the ICC just did not know enough about the general freight segment and its markets to propose appropriate reforms. Congress and deregulatory advocates apparently felt they knew enough.

Assuming that the right monitoring points are focused on and the right questions are asked, how do we evaluate the answers? How many rates should go down to allow us to make a pronouncement that the zone-of-rate freedom is functioning properly? How far should rates go down? What about upward moving rates? If firms complain that service on particular categories of freight is no longer available, how prevalent must this be to declare that the common carrier obligation has deteriorated since the passage of the act? What rate of decline would be compelling evidence for a restoration of the enforcement of the common carrier obligation? What are acceptable or unacceptable levels of performance for each monitoring point at each observation on the monitoring timetable?

And do not overlook the need to build reliability and validity into the monitoring program. The entire populations or subpopulations of those firms, communities, and so forth, should be properly sampled according to proper survey designs and procedures. The survey instruments should be professionally prepared, tested, and employed by trained personnel. All of this is essential if the data produced are to be sufficiently free of bias to serve as an acceptable basis for decision making.

Neither should those responsible for the integrity of the monitoring program fail to establish the standards of acceptability in advance. Likewise, confidence intervals should be specified beforehand. Both should be written in the task specifica-

tions, whether done within an agency or by contract. Standards must be stated so that those responsible for the effort's integrity and its subsequent application may exercise control of the unit performing the task. To do otherwise is to give the task-performing unit inadequate guidance. Confidence intervals are expressions of levels of acceptable imprecision in the degree to which sample statistics reflect the actual condition of the population being studied. A 95 percent confidence interval, for example, states that we can be confident that the numerical representation of the population (mean, proportion, and so forth) that is being estimated by sampling will be included in a specified interval around the sample statistic.

There are two reasons why this item should be stated before the monitoring is undertaken. First, failing to do so will allow the analysts and users to "fudge" the results, i.e., to reject or accept the results as their mood or personal proclivities move them. Second, the cost of the survey will be directly related to the level of precision prescribed.

IMPORTANCE OF MONITORING

Appropriate analytical approaches, such as various experimental designs, should be considered to help assure randomized, objective results. Survey approaches should be carefully controlled in design, conduct, and interpretation.

It is too easy to look at conditions observed after the fact of the legislation's being applied and saying, "That's what Congress was looking for. The legislation is 'working'." Or, conversely, "That's what some carriers (shippers or communities) were afraid of. The legislation is a 'disaster'." Responsible monitoring does not just measure out-

comes and link observations blindly to the initiating factors being evaluated.

This is another important reason why monitoring should be done with common sense, integrity, statistical objectivity, and professionalism. Causality is a major problem in any research effort. This is a sizable and a complex research effort and requires all of the attributes mentioned here.

In conclusion, there has been promise of billions of dollars in annual savings available to the economy as a result of the implementation of the new legislation. There is also concern that there are displacement costs that could overwhelm whatever savings are actually encountered. The quality of the monitoring effort will, I hope, raise the quality of the analytical effort that went into the development of the legislation and the policies flowing from it. If there are savings, in which the social benefits exceed the social costs, we should go further. If there are net social losses, perhaps there should be reversals or revisions. Neither the market nor policymakers are perfect. Regulation is not unique in that respect.

REFERENCES

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Changing Market Structure for the For-Hire Motor Carrier

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This paper identifies the elements affecting the market structure of our trucking system and the long-term impact of altering these elements. To the extent that structural impacts may occur from less regulation, the impact of instituting these changes is also addressed. It is expected that these changes may be limited to selected carrier activities. To the extent that these elements can be measured, a quantitative analysis has been undertaken.

The regulatory system that was instituted more than 40 years ago in the Motor Carrier Act of 1935 (also known as Part II of the Interstate Commerce Act) had remained relatively stable until recently. The only major changes, impacts, or exceptions to the original act were (previous to the past two years): (a) the 1948 Reed-Bulwinkle Act that permitted joint ratemaking, (b) the Transportation Act of 1958 that overturned the concept of umbrella ratemaking; and (c) the creation of the U.S. Department of Transportation that moved safety regulation from the Interstate Commerce Commission (ICC) to the new agency. These alterations, for the most part, did not adversely impact motor carrier profits or the carriers' operating systems and strategies. In fact, these changes tended to provide stability for the industry.

In more recent times, changes to the nature and functions of the regulatory system have accelerated. The focus of these changes has been toward loosening regulatory constraints over the elements within the transportation system. These elements can be described in terms of both modal and industry components.

The transportation system is made up of elements that both interact and compete in the transportation production function. To a degree, many of the elements within both the modal and industry components are similar (pickup, delivery, and line haul). However, within each of the industry components, the activities are performed differently. To the degree that the activities are different is a function of one or more of the following: regulatory requirements, technological efficiencies, management philosophies, market demands (service standards), competitive forces, or joint production needs.

Current changes with the legislative enactment of the Motor Carrier Act of 1980 and alterations in the regulatory process at the ICC seem to be focusing on the regulatory requirements, with limited reference