United States General Accounting Office

GAO

Report to the Chairman, Committee on Transportation and Infrastructure, House of Representatives

June 2002

RAILROAD REGULATION

Changes in Freight Railroad Rates from 1997 through 2000

G A O

Accountability ★ Integrity ★ Reliability

GAO-02-524

Contents

Letter

	1
Results in Brief	2
Background	3
Rail Rates Generally Continued to Fall	6
Proportion of Rail Industry Revenues Exceeding 180 Percent of Variable Costs Generally Were Stable	25
Agency Comments and Our Evaluation	30

Appendixes

Appendix I:	**Scope And Methodology**	32
Appendix II:	**Real Rail Rates for Coal**	34
Appendix III:	**Real Rail Rates for Wheat and Corn Shipments**	36
Appendix IV:	**Real Rail Rates for Chemicals and Transportation Equipment**	38

Figures

Figure 1:	Rail Rate Index for the Transportation of Selected Commodities, 1990–2000	8
Figure 2:	Real Rail Rates for Coal, Selected Medium-Distance Routes, 1990–2000	13
Figure 3:	Real Rail Rates for Wheat, Selected Medium-Distance Routes, 1990–2000	16
Figure 4:	Real Rail Rates for Corn, Selected Medium-Distance Routes, 1990–2000	19
Figure 5:	Real Rail Rates for Plastic Materials or Synthetic Fibers, Resins, or Rubbers, Selected Short-Distance Routes, 1990–2000	22
Figure 6:	Real Rail Rates for Motor Vehicles, Selected Medium-Distance Routes, 1990–2000	24
Figure 7:	Percentage of Rail Industry Revenue Exceeding 180 Percent of Variable Costs for Selected Commodities, 1990–2000	26
Figure 8:	R/VC Ratios for Medium-Distance Shipments of Wheat, 1990–2000	29
Figure 9:	Real Rail Rates for Coal, Selected Short-Distance Routes, 1990–2000	34
Figure 10:	Real Rail Rates for Coal, Selected Long-Distance Routes, 1990–2000	35

Figure 11: Real Rail Rates for Wheat, Selected Short- and Long-Distance Routes, 1990–2000 36
Figure 12: Real Rail Rates for Corn, Selected Short- and Long-Distance Routes, 1990–2000 37
Figure 13: Real Rail Rates for Potassium/Sodium Compounds, Selected Short-, Medium-, and Long-Distance Routes, 1990–2000 39
Figure 14: Real Rail Rates for Plastic Materials or Synthetic Fibers, Resins, or Rubbers, Selected Medium- and Long-Distance Routes, 1990–2000 40
Figure 15: Real Rail Rates for Motor Vehicles, Selected Long-Distance Routes, 1990–2000 41
Figure 16: Real Rail Rates for Motor Vehicle Parts or Accessories, Selected Medium- and Long-Distance Routes, 1990–2000 42

Abbreviations

Conrail	Consolidated Rail Corporation
R/VC	revenue-to-variable cost

G A O
Accountability * Integrity * Reliability

United States General Accounting Office
Washington, D.C. 20548

June 7, 2002

The Honorable Don Young
Chairman, Committee on
Transportation and Infrastructure
House of Representatives

Dear Mr. Chairman:

The Railroad Revitalization and Regulatory Reform Act of 1976 and the Staggers Rail Act of 1980 gave freight railroads increased freedom to price their services according to market conditions. A number of shippers are concerned that freight railroads have used these pricing freedoms to unreasonably exercise their market power in setting rates for shippers with fewer alternatives to rail transportation. In 1999, we generally reported that most rail rates had decreased from 1990 through 1996, and that rates for shipments of selected commodities with effective competitive transportation alternatives—such as from other railroads, trucks, or barges—generally had decreased to a greater extent than rates for shipments without such alternatives.[1] However, some rates had increased. These results were consistent with the pricing freedoms provided by federal law that allows railroads to price their service in relation to market demand and competition.

This report responds to your request that we update the rate information in our 1999 report using the same commodities and markets. For the period from 1997 through 2000, we (1) examine changes in rates and (2) describe changes in the proportion of shipments above the Surface Transportation Board's statutory jurisdictional threshold for rate relief actions (shipments in which revenues exceed 180 percent of variable costs).[2] To do so, we used the *Carload Waybill Sample* maintained by the Surface Transportation Board to determine rates for coal, grain (wheat and corn), chemicals (potassium and sodium compounds and plastic materials or synthetic fibers, resins, or rubber), and transportation equipment (finished

[1]U.S. General Accounting Office, *Railroad Regulation: Changes in Railroad Rates and Service Quality Since 1990*, GAO/RCED-99-93 (Washington, D.C.: Apr. 16, 1999).

[2]The Surface Transportation Board is the industry's economic regulator. Among other things and upon request, it decides disputes between shippers and railroads over the reasonableness of rates. Rates are not presumed unreasonable solely because they are above this threshold.

motor vehicles and motor vehicle parts or accessories).[3] These commodities represented a substantial portion of total industry revenue. We analyzed rate changes for these commodities in the top five transportation corridors (measured by tons shipped) according to length of haul (short, medium, and long). (See app. I for additional discussion of our methodology.) Although the focus of our work centered on the 1997–2000 period, we also present the results of our previous work covering the 1990–1996 period for perspective.

Results in Brief

From 1997 through 2000, rail rates generally decreased, both nationwide and for many of the specific commodities and markets that we examined.[4] However, rail rates for some commodities and distance categories—such as wheat moving long distances (over 1,000 miles) and coal moving short distances (up to 500 miles)—have stayed about the same or increased. In other instances, such as wheat moving medium distances (501 to 1,000 miles), rail rates stayed about the same or decreased. There may be a variety of reasons why rail rates change over time, including increases or decreases in production or export of various commodities (such as coal or grain); changes in railroad costs; changes in use of contracts that tie rates to specific volumes of business; service problems that could affect the ability of railroads to supply railcars, crews, and locomotive power to meet the demand for rail transportation; or the degree of competition from other rail or nonrail (such as barge or truck) transportation providers. In general, as expected, rail rates were lower in areas with more, rather than less, competition from other transportation providers.

Overall, the proportion of rail shipments above the board's statutory jurisdictional threshold for considering rate relief actions—where railroad revenues for the shipment exceed 180 percent of variable costs (variable costs are those costs that change with the quantities shipped)—stayed relatively constant at about 30 percent from 1997 through 2000. However, the proportion of shipments for which revenues exceeded variable costs by 180 percent varied depending on commodity and markets. For example, in

[3]The *Carload Waybill Sample* is a sample of documents prepared from bills of lading (authorizing railroads to move shipments and collect freight charges) that are submitted by railroads annually.

[4]Rates are measured as cents per ton-mile. A ton-mile is 1 ton of freight transported 1 mile. Unless otherwise noted, all rates are in 1996 dollars. We used 1996 dollars to facilitate comparisons of the results in this report with those presented in our 1999 report.

2000, 62 percent of chemicals were transported at rates generating revenues exceeding 180 percent of variable costs. However, in the same year, only 17 percent of transportation equipment (which includes motor vehicles and motor vehicle parts or accessories) was transported at rates above this level. Although revenue-to-variable cost ratios are often used as indicators of shippers' captivity to railroads, changes in such ratios over time may not be a reliable indicator of trends in the actual rates being paid by shippers. Such ratios can be increasing at the same time as rates are decreasing and, conversely, decreasing at the same time as rates are increasing. In particular, if industry productivity increases and the cost savings are passed entirely on to customers in the form of rate reductions, revenue-to-variable cost (R/VC) ratios may increase, since both the numerator and denominator would be decreased by the same amount.

In commenting on a draft of this report, both the board and the Department of Transportation generally agreed that it accurately portrayed rail rate trends over the 1997 through 2000 period. The board said it is difficult to identify with specificity why rail rates change in the short run, especially for specific commodities over specific routes. The board suggested that our report recognize additional factors, such as commodity supply, that influence rate changes. The department suggested that our Results in Brief could better recognize that R/VC ratios by themselves are not good indicators of railroad market power. We revised the report to reflect these comments.

Background

Railroads are the primary mode of transportation for many products, especially for such bulk commodities as coal and grain. Yet by the 1970s, American freight railroads were in a serious financial decline. Congress responded by passing the Railroad Revitalization and Regulatory Reform Act of 1976 and the Staggers Rail Act of 1980. These acts reduced rail regulation and encouraged greater reliance on competition to set rates. Railroads have also continued to consolidate (through such actions as mergers, purchases, changes in control, and acquisitions) to reduce costs, increase efficiencies, and improve their financial health.

The 1976 act limited the authority of the Interstate Commerce Commission (now the Surface Transportation Board) to regulate rates to instances in which there is an absence of effective competition—that is, where a railroad is "market dominant." The 1980 act made it federal policy to rely, where possible, on competition and the demand for rail services (called demand-based differential pricing) to establish reasonable rates. Differential pricing recognizes that inherent in the rail industry cost structure are joint and common costs that cannot be attributed to particular traffic. Under demand-based differential pricing, railroads recover a greater proportion of these unattributable costs from rates charged to those with a greater dependency on rail transportation. Among other things, the 1980 act also (1) allowed railroads to market their services more effectively by negotiating transportation contracts (generally offering reduced rates in return for guaranteed volumes) containing confidential terms and conditions; (2) limited collective rate-setting to those railroads actually involved in a joint movement of goods; and (3) permitted railroads to change their rates without challenge in accordance with a rail cost adjustment factor. Furthermore, both acts required the Interstate Commerce Commission to exempt railroad transportation from economic regulation in certain instances. The Staggers Rail Act required exemptions where regulation is not necessary to carry out rail transportation policy and where a transaction or service is of limited scope,[5] or where regulation is not needed to protect shippers from an abuse of market power. During the 1980s and 1990s, railroads used their increased pricing freedoms to improve their financial health and competitiveness.

[5]A transaction is something other than a continuing service provided by railroads that requires board approval (such as the control of one railroad by another or an abandonment of track).

In addition, the railroad industry has continued to consolidate in the last 2 decades to become more competitive by reducing costs and increasing efficiencies. (This consolidation continues a trend that has been occurring since the nineteenth century.) In 1976, there were 30 independent Class I railroad systems, consisting of 63 Class I railroads. (Class I railroads are the nation's largest railroads.) Currently there are 7 railroad systems, consisting of 8 Class I railroads. Half of that reduction was attributable to consolidations.[6] The 8 Class I railroads are the Burlington Northern and Santa Fe Railway Co.; CSX Transportation, Inc.; Grand Trunk Western Railroad, Inc.; Illinois Central Railroad Co.; Kansas City Southern Railway Co.; Norfolk Southern Railroad Co.; Soo Line Railroad Co., and Union Pacific Railroad Co.

The Surface Transportation Board is the industry's economic regulator. The board is a decisionally independent adjudicatory agency administratively housed within the Department of Transportation. Among other things, board approval is needed for market entry and exit of railroads and for railroad mergers and consolidations. The board also adjudicates complaints concerning the quality of rail service and the reasonableness of rail rates. Under the ICC Termination Act of 1995, the board may review the reasonableness of a rate only upon a shipper's complaint. Moreover, the board may consider the reasonableness of a rate only if (1) the revenue produced is equal to or greater than 180 percent of the railroad's variable costs for providing the service and (2) it finds that the railroad in question has market dominance for the traffic at issue. If the revenue produced by that traffic equals or exceeds the statutory threshold, then the board examines intramodal and intermodal competition to determine whether the railroad has market dominance for that traffic and, if so, whether the challenged rates are reasonable.

From 1997 through 2000, there were two periods during which major portions of the rail industry experienced serious service problems. The first began in July 1997, during implementation of the Union Pacific Railroad and Southern Pacific Transportation Company merger. As a result of aging infrastructure in the Houston, Texas, area that was inadequate to cope with a surge in demand, congestion on this system began affecting rail

[6]Other reasons for the reduction in the number of Class I railroads were carrier bankruptcies and various changes in the threshold for qualifying as a Class I railroad (from $5 million in 1976 to $250 million in 1992, as measured in 1991 dollars, and adjusted for inflation since then). Bankruptcies eliminated 2 of the 30 Class I railroad systems, while changes in the Class I standard moved 9 systems out of Class I status.

service throughout the western United States. Rail service disruptions and lengthy shipment delays continued through the rest of 1997 and into 1998. The board issued a series of decisions that generally were designed to enhance the efficiency of freight movements by changing the way rail service is provided in and around the Houston area. These decisions principally focused on the Houston/Gulf Coast area and included an emergency service order to address the service crisis. In addition, CSX Transportation and Norfolk Southern Corporation began experiencing service problems in the summer and early fall of 1999, shortly after they began absorbing their respective parts of the Consolidated Rail Corporation (Conrail). These service problems caused congestion and shipment delays, primarily in the Midwest and Northeastern parts of the country. By early 2000, those service problems had largely been resolved without formal board action.

Rail Rates Generally Continued to Fall

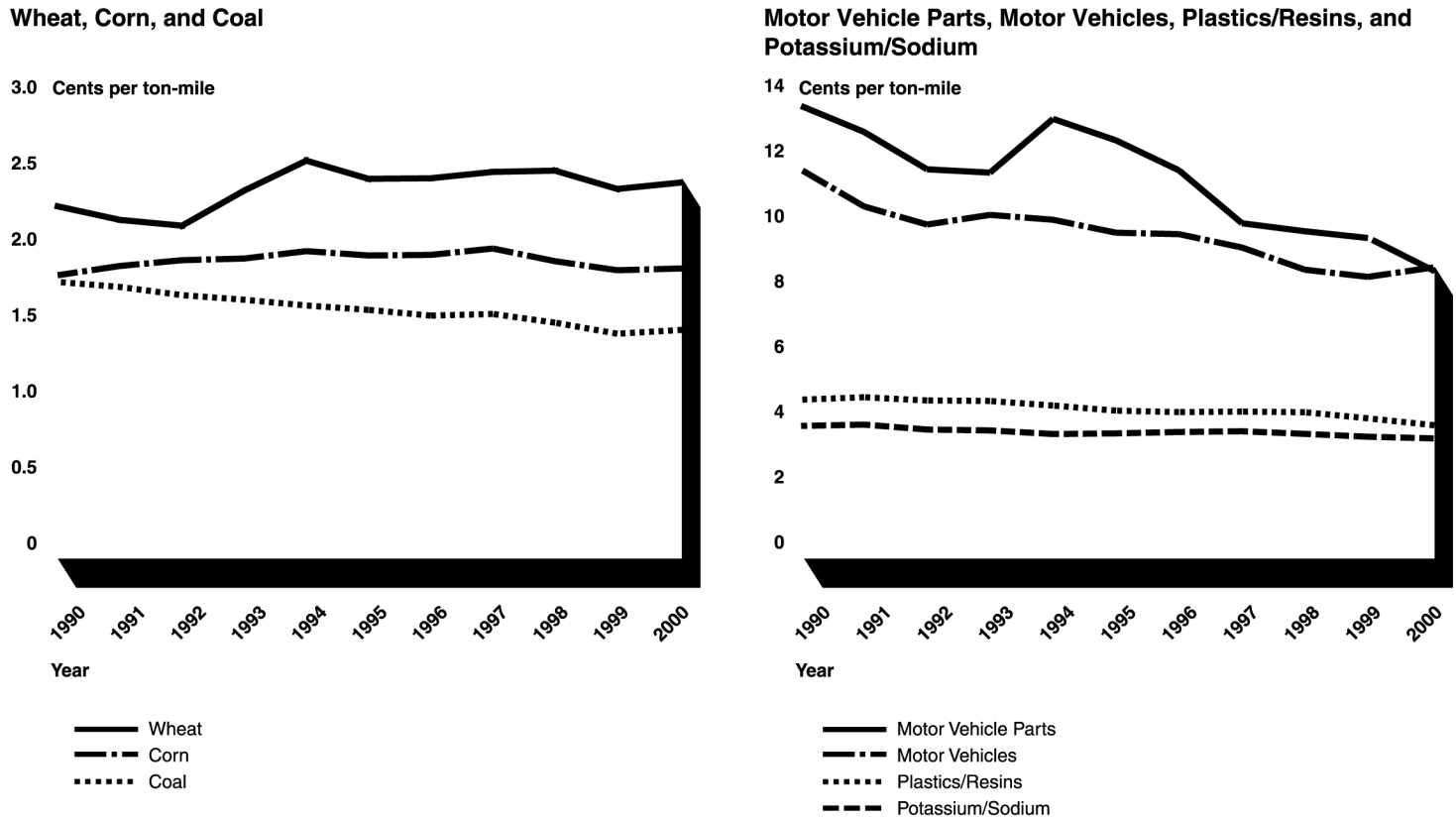
Rail rates generally have continued to fall nationwide for the commodities we studied and in the specific markets we reviewed. However, in several markets rates either increased over the 4-year period for certain commodities or increased and then later fell, resulting in an overall decrease for the period. There may be a variety of reasons why rail rates change over time, including increases or decreases in production or export of various commodities (such as coal or grain); changes in railroad costs; changes in use of contracts that tie rates to specific volumes of business; service problems that could affect the ability of railroads to supply railcars, crews, and locomotive power to meet the demand for rail transportation; or the degree of competition. We do not attempt to identify and explain all the various reasons for changes in the rail rates we examined. Rather, our aim is to put rate changes for particular commodities into context with some of the economic or rail industry conditions that might have affected them from 1997 through 2000.

Rates for Selected Commodities Have Generally Continued to Fall Nationally

Rates for coal, grain (wheat and corn), chemicals (potassium and sodium compounds and plastic materials or synthetic fibers, resins, or rubber), and transportation equipment (finished motor vehicles and motor vehicle parts or accessories) generally fell from 1997 through 2000.[7] (See fig. 1.) These decreases followed the general trend we previously reported on for the 1990–1996 period and, as before, tended to reflect railroad cost reductions brought about by continuing productivity gains in the railroad industry that have allowed railroads to reduce rates in order to be competitive.

[7]For this analysis we used rate indexes. A rate index attempts to measure price changes over time by holding constant the underlying collection of items that are consumed (for example, items shipped). See appendix I for a discussion of the rate indexes that we constructed.

Figure 1: Rail Rate Index for the Transportation of Selected Commodities, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

From 1997 through 2000, the rates for coal decreased slightly but steadily from about 1.5 cents per ton-mile to about 1.4 cents per ton-mile. Coal production fluctuated over this period but generally decreased from about 1.12 billion tons in 1998 to about 1.08 billion tons in 2000. The production of coal shipped for export also generally decreased from about 83.5 million tons in 1997 to 58.5 million tons in 2000. The Energy Information Administration attributed these decreases to, among other things, a draw down in coal stocks by utilities and reluctance on the part of some coal producers to expand production.[8] Lower demand for rail transportation

[8]Fred Freme, U.S. Energy Information Administration, *U.S. Coal Supply and Demand: 2000 Review* (undated).

resulting from lower production generally results in lower rail rates. However, the demand for rail transportation (and consequently rail rates) can also be affected by changes in coal held as inventory and other supply-related factors. Board officials suggested that the decrease in coal rates during this period could also be attributed in part to increasing competition between low-sulfur Powder River Basin coal from the West and higher-sulfur Eastern coal, and to the expiration and resulting renegotiation of many long-term coal transportation contracts.

The rates for wheat increased slightly from 1997 to 1998—from about 2.46 cents per ton-mile in 1997 to about 2.47 cents per ton-mile—before falling back in 1999 and 2000 to just under 2.4 cents per ton-mile. Rates for wheat may have decreased because overall production decreased, from 67.5 million tons for the 1997–1998 season to 60.5 million tons for the 2000–2001 season, despite a modest increase in demand for exports (from 28.1 million tons to 30.0 million tons over the same period). Preliminary information indicates that in 1998, the most recent year for which data were available, railroads transported over half (about 55 percent) of all wheat shipments.

Corn rates generally decreased from about 2 cents per ton-mile in 1997 to about 1.8 cents per ton-mile in 2000. Corn production fluctuated between 1997 and 1999 (the latest year for which data are available), increasing from 9.2 million bushels in 1997 to 9.8 million bushels in 1998 before falling back to 9.4 million bushels in 1999. However, the domestic use of corn (the primary use of corn) increased by about 4 percent—from 7.3 million bushels in 1997 to 7.6 million bushels in 1999. This increase suggests, all else being equal (including rail costs), greater demand for transportation and possibly higher rail rates. Yet, rail rates for corn are influenced by a number of factors. Significant amounts of corn are produced in areas accessible to navigable waterways and, therefore, the transportation of corn is less dependent on rail. (About 25 percent of corn was shipped by rail in 1998, the latest year for which data are available.) In addition, rates may be affected by the supply of corn. From 1997 through 1999 (the latest year for which data are available) the total supply of corn increased from 10.1 million bushels to 11.2 million bushels.[9] It is possible that intermodal

[9]The total supply of corn is a combination of carryover stock, production, and imports.

competition, increased domestic use of corn, and an increasing supply of corn may have all influenced rail rates for corn.[10]

The rates for chemicals (as illustrated by rates for potassium/sodium and plastics) decreased slightly from 1997 through 2000 at a steady rate. According to data from the American Chemistry Council, the production of chemicals in the potassium/sodium classification increased between 1997 and 1999. Plastics production also steadily increased over the period.[11] These data suggest that, all things being equal, rail rates should have increased over the period because of a higher demand for rail transportation. However, over 65 percent of chemicals are transported less than 250 miles, a distance that is truck competitive, which may indicate that railroad rates are sensitive to truck competition. In addition, not all chemicals that are produced require immediate transportation. An official with the American Chemistry Council told us that chemical manufacturers often produce a product, load it onto railcars, and store the railcars until the product is sold, at which point it is transported to destination. Although the tonnage of chemicals shipped by rail generally increased between 1997 and 2000, railroads accounted for only 20 percent of the tonnage transported in 2000. This is up slightly from the 19 percent transported in 1997.[12]

Rates for motor vehicles and parts also generally decreased over the 4-year period, but not at a steady rate. This occurred during a time when U.S. car and truck production generally fluctuated between 12 million and 13 million units. Car production, in particular, generally decreased over the period from about 5.9 million units to about 5.5 million units, according to Crain Communications, Inc., a publisher of *Automotive News*. The automotive industry is heavily dependent on railroads, and the Association of American Railroads—a railroad trade group—estimates that railroads transport about 70 percent of finished motor vehicles. Automotive production declines, among other things, might have contributed to

[10]According to the board, corn rates also tend to be lower than wheat rates, in part, because corn is more likely than wheat to move in longer 110-car unit trains which are more cost efficient than shorter trains.

[11]Potassium/sodium production increased from about 69 million tons in 1997 to about 70 million tons in 1999 before falling back in 2000 to just under 68 million tons. Plastics production increased from about 52.6 million tons in 1997 to about 58 million tons in 2000.

[12]In contrast, the tonnage of chemicals transported by truck remained at about 55 percent between 1997 and 2000.

generally decreasing rail rates. Data on auto parts production were not available.

In its own study, the board found that the average, inflation-adjusted rail rate had continued a multi-year decline in 1999 and that, since 1984, real rail rates had fallen 45 percent.[13] It found that real rail rates had decreased for both eastern and western railroads. According to the board, the results of its study implied that, although railroads retain a degree of pricing power in some instances, nearly all productivity gains achieved by railroads since the 1980s (when railroad economic regulation was reduced) have been passed on to rail customers in the form of lower rates. The board estimated that rail shippers would have paid an additional $31.7 billion for rail service in 1999 if revenue per ton-mile had remained equal to its 1984 inflation-adjusted level. The board acknowledged, however, that even though real rail rates had decreased overall, individual rates might have increased and, further, that some rail customers might feel disadvantaged if their rates did not fall to the same extent as their competitors' rates.

Rail Rates for Specific Markets Generally Have Continued to Fall

Our analysis of rail rates for coal, grain (corn and wheat), chemicals (potassium, sodium, plastics, and resins), and motor vehicles and motor vehicle parts in selected high-volume transportation markets generally showed that rates continued to decrease from 1997 through 2000. However, this was not true in all markets. Rail rates may have been sensitive to competition, and rail rates were generally higher in areas considered to have less railroad-to-railroad competition.

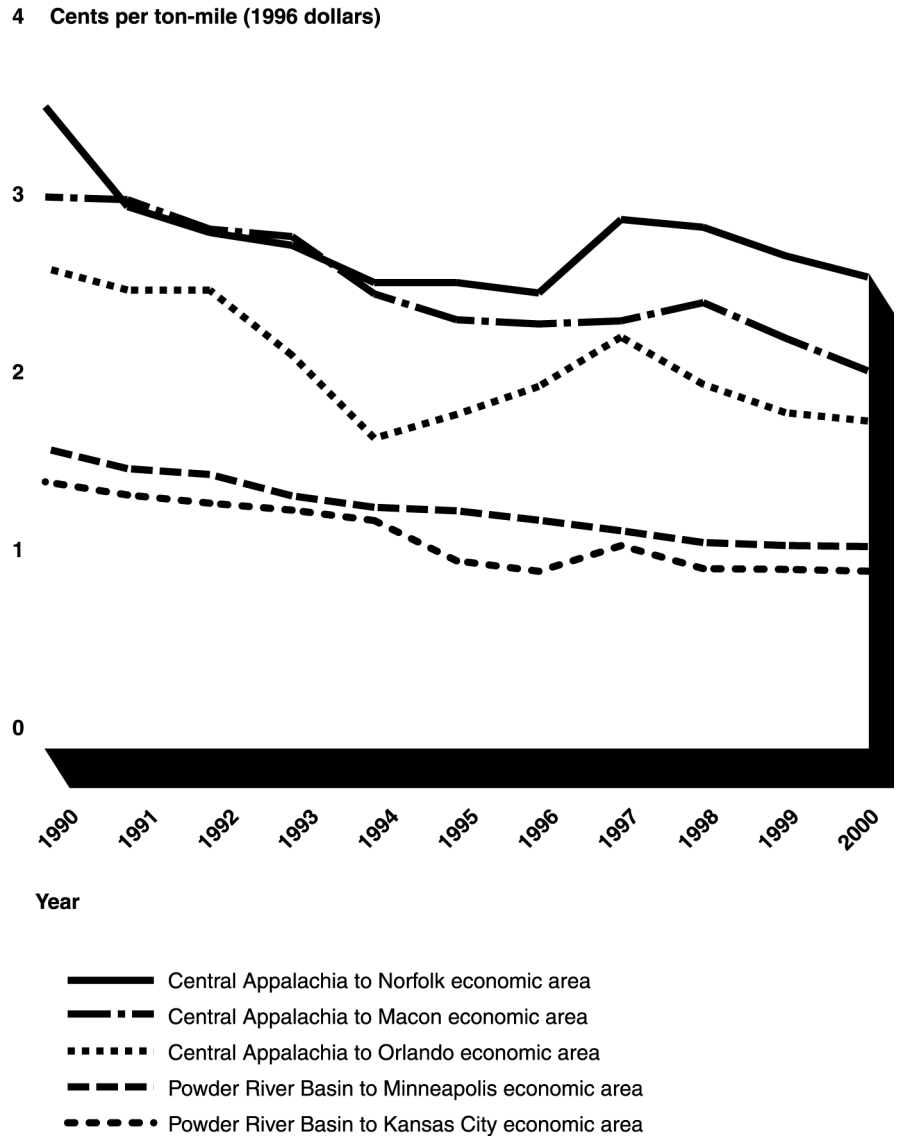
[13]Surface Transportation Board, *Rail Rates Continue Multi-Year Decline*, Office of Economics, Environmental Analysis, and Administration (Dec. 2000). The board measured rail rates as gross revenue per ton-mile of freight originated and stated these rates in 1999 dollars. The board used a rate index in which it aggregated annual rate changes for the 1984 to 1999 period for different commodity groups by weighting each commodity's year-by-year rate change by its share of total rail revenue in those two years.

Coal

Real rail rates for coal, although fluctuating in some markets, generally decreased from 1997 through 2000. In virtually every market we analyzed—both in the East (Appalachia) and in the West (Powder River Basin)—rates decreased. For example, on a medium-distance route from Central Appalachia to Orlando, Florida, rates decreased from about 2.2 cents per ton-mile in 1997 to 1.7 cents per ton-mile in 2000.[14] (See fig. 2.) The 2000 rate was also substantially less than the rate of 2.6 cents per ton-mile in 1990.

[14]Appendix II contains illustrations of real rail rates for coal shipments on short- and long-distance routes.

Figure 2: Real Rail Rates for Coal, Selected Medium-Distance Routes, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

Competition may have played a role in the decrease in coal rates that we examined. In the West, the two Class I railroads that served the Powder River Basin during the 1990–1996 period, the Burlington Northern and Santa Fe Railway and the Union Pacific, continued to serve the market from 1997–2000. In the East, three Class I railroads served Central Appalachia until mid-1999: Conrail, CSX Transportation, and Norfolk Southern.[15] Following its acquisition by the latter two carriers, Conrail began being absorbed into CSX Transportation and Norfolk Southern in June 1999, with the latter two carriers continuing to serve the market. As part of this transaction, certain areas of Pennsylvania and West Virginia (part of the Appalachia Coal Supply Region) that had been served exclusively by Conrail, although conveyed to Norfolk Southern, are available to CSX on an equal-access basis for 25 years, subject to renewal.

Finally, rail rates for coal can be influenced by coal production as well as existing supplies of coal. In general, coal production in the Appalachian area decreased from 1997 to 2000—from about 468 million tons to about 421 million tons. On the other hand, coal production in the Western region (which includes the Powder River Basin) increased between 1997 and 1999—from about 451 million tons to about 512 million tons—before falling back to 510 million tons in 2000. In its 2000 review, the Energy Information Administration noted that coal production in Wyoming (which dominates coal production in both the West and the United States) was driven higher by an increasing penetration of Powder River Basin coal into Eastern markets—an action creating competition for coal produced in the East.[16] Board officials told us that in order for Powder River Basin coal to penetrate Eastern markets, railroads have had to offer very low transportation rates. In addition, they suggested that rail rates for Powder River Basin coal are lower than rail rates for Appalachian coal because of the ability of railroads to use larger (110-car unit) trains to pick up the coal and because of more favorable terrain (flatter and straighter routes) to transport the coal from the mines. Coal supply (as measured by year-end coal stocks) generally fluctuated over the 1997 through 2000 period—increasing from about 140 million tons in 1997 to 183 million tons in 1999, before falling back to 142 million tons in 2000.

[15]The Central Appalachia Coal Supply Region includes eastern Kentucky, Virginia, and southern West Virginia.

[16]Fred Freme, Energy Information Administration.

Wheat and Corn

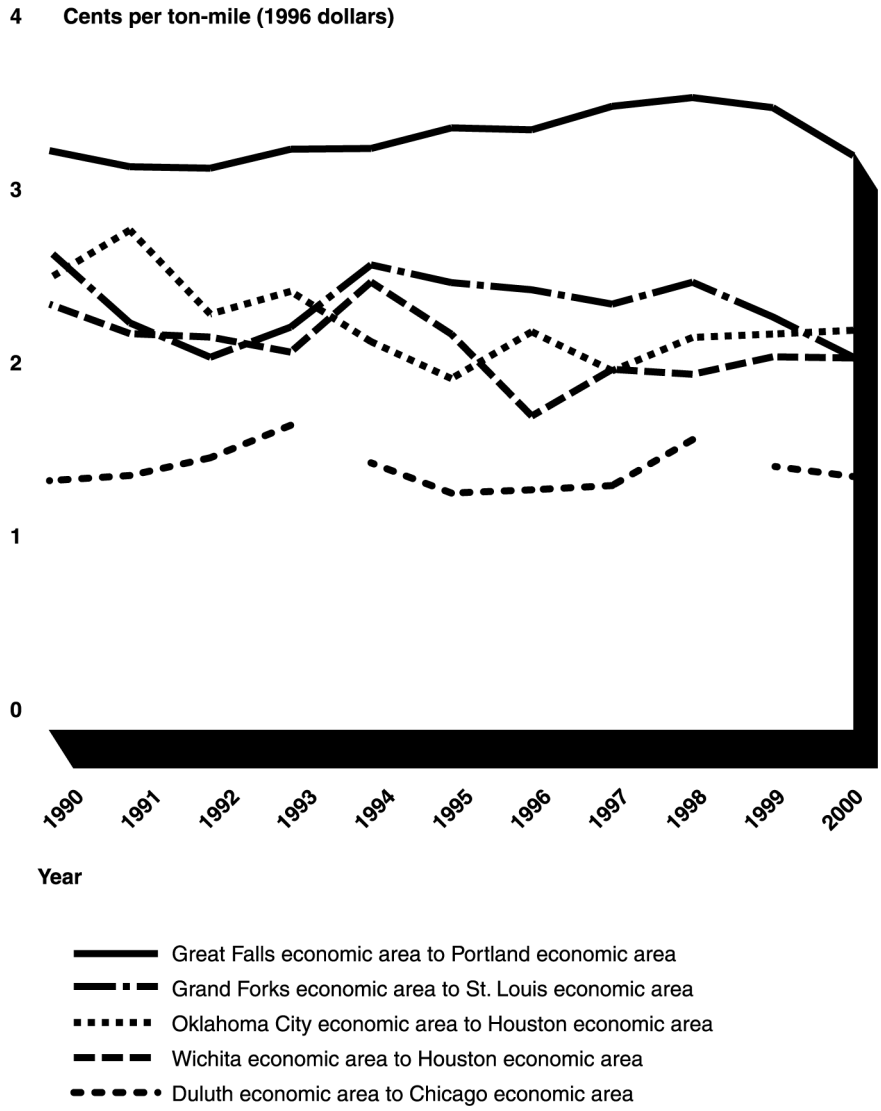
From 1997 through 2000, real rail rates for shipments of wheat and corn generally stayed the same or decreased for the markets that we reviewed.[17] For example, wheat shipments moving over medium-distance (501 miles to 1,000 miles) routes generally followed this pattern. (See fig. 3.) The exception was wheat shipped from the Oklahoma City, Oklahoma, economic area to the Houston, Texas, economic area.[18] On this route, rail rates generally increased by 12 percent—from 1.9 cents per ton-mile in 1997 to 2.2 cents per ton-mile in 2000. The largest increase occurred between 1997 and 1998, when rates went from 1.9 to 2.1 cents per ton-mile. This increase came at about the same time as the service crisis in the Houston/Gulf Coast area that delayed the delivery of railcars and, in some cases, halted freight traffic. Although board officials did not think railroads used rail rates to allocate the supply of railcars during this time, such an action could have occurred for particular commodities on particular routes. The increases also came at the same time as wheat production in Oklahoma rose from about 170 million bushels in 1997 to just under 200 million bushels in 1998. This may be consistent with an increase in the handling of bulk grain by the Port of Houston Authority between 1997 and 1998, from about 388,000 tons to 1.2 million tons.[19] These factors may also have contributed to a general increase in rail rates for these movements. Even with these increases, the rail rate in 2000 was still less than it was in 1990—about 2.2 cents per ton-mile in 2000, as compared with 2.5 cents per ton-mile in 1990.

[17]Appendix III contains illustrations of the real rail rates on selected long- and short-distance routes for wheat and corn.

[18]An economic area is a collection of counties in and about a metropolitan area (or other center of economic activity); there are 172 economic areas in the United States, and each of the 3,141 counties in the country is contained in an economic area.

[19]Wheat production in Oklahoma subsequently declined to about 143 million bushels (preliminary estimate) in 2000. Bulk grain statistics for the Port of Houston Authority may include shipments from other domestic locations as well as imports.

Figure 3: Real Rail Rates for Wheat, Selected Medium-Distance Routes, 1990–2000



Note: For confidentiality, data points for the route from the Duluth economic area to the Chicago economic area for 1993 and 1999 were excluded.

Source: GAO's analysis of the Surface Transportation Board's data.

Rail rates for wheat from the northern plains locations of the Great Falls, Montana, and Grand Forks, North Dakota, economic areas on medium-distance routes generally decreased over the period.[20] Wheat production and demand for rail transportation may have been influencing factors. Although the volume of export wheat was increasing over the 1997 to 2000 period, wheat production in various states fluctuated. For example, wheat production in Montana steadily declined between 1997 and 2000, from about 182 million bushels to about 154 million bushels. In contrast, wheat production in North Dakota (the second highest wheat producing state behind Kansas in 2000) fluctuated between about 240 million bushels and 315 million bushels, alternately increasing and decreasing beginning in 1997. Whether wheat is transported or not depends on many factors, including the price of wheat and the amount of carryover stocks from year to year. In 2001, the U.S. Department of Agriculture reported that grain car loadings on railroads had steadily decreased over the previous 5 years, with the exception of 1999.[21] This was attributed, at least partially, to farmers holding on to grain because of large harvests, large carryover stocks, and low prices.

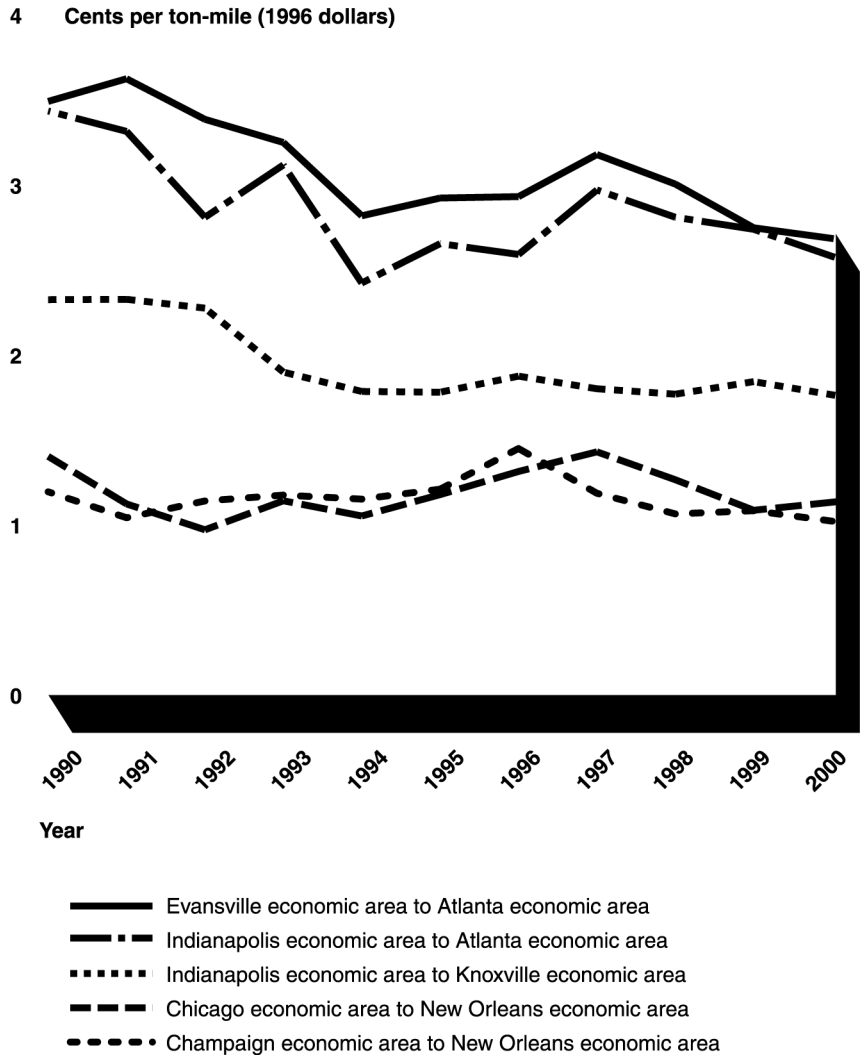
[20]Real rail rates for other distance categories reflected similar trends, except for rate increases between 1999 and 2000 on three of the five short-distance (500 miles or less) routes we examined.

[21]U.S. Department of Agriculture, Agricultural Marketing Service, *Grain Transportation Prospects* (Feb./Mar. 2001).

Rate trends between 1997 and 2000 for the shipment of corn were similar to those for wheat. Again, rate trends for corn can be illustrated in the rail rates for medium-distance routes. (See fig. 4.) The rates for most of these routes generally either stayed about the same or decreased over the period. Similar patterns are seen in the other distance categories. However, some rail rates on short-distance routes increased between 1999 and 2000. This was particularly true for corn shipments within the Minneapolis, Minnesota, economic area, where rates went from about 3.5 cents per ton-mile in 1999 to about 4.2 cents per ton-mile in 2000. The specific reasons for this increase are not clear. Corn production in Minnesota generally decreased during this period, from about 990 million bushels in 1999 to about 957 million bushels in 2000. However, in November 1999, the U.S. Department of Agriculture reported that, while corn production and exports were expected to decrease, the domestic use of corn was expected to remain strong, and that domestic use of corn was heavily dependent on rail and truck transportation.[22] Other than livestock feed, domestic use of corn includes corn sweeteners (used in the soft drink industry) and ethanol (a fuel additive). Minnesota also has an active livestock industry, and the state ranked third highest in the country in the number of hogs and pigs produced and hogs marketed in 1999 (behind Iowa and North Carolina).

[22]U.S. Department of Agriculture, Agricultural Marketing Service, *Grain Transportation Prospects* (Nov. 1999).

Figure 4: Real Rail Rates for Corn, Selected Medium-Distance Routes, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

Rail rates for wheat and corn shipments appear to be sensitive to both inter- and intramodal competition. As shown in figure 3, rates for wheat shipments from the Duluth, Minnesota, to the Chicago, Illinois, economic areas—a potential Great Lakes water competitive route—continued to be between 0.72 cents to just under 2 cents per ton-mile lower in 2000 than rates on other medium-distance routes we examined that potentially had fewer transportation alternatives (for example, shipments from Great

Falls). In addition, as shown in figure 4, rail rates for corn shipments from the Chicago and Champaign, Illinois, economic areas to the New Orleans, Louisiana, economic area—potentially barge-competitive routes—were substantially lower (up to 1.7 cents per ton-mile in 2000) than rates on other medium-distance corn routes we examined that potentially had fewer transportation choices (for example, shipments from the northern plains states). Sensitivity to intramodal (railroad-to-railroad) competition also continued to be evident. For example, rail rates from 1997 through 2000 for wheat shipments originating in the Wichita, Kansas, and Oklahoma City, Oklahoma, economic areas were about 1.4 cents per ton-mile lower than rail rates for wheat shipments from the Great Falls economic area to the Portland, Oregon, economic area over the same period. The central plains area is considered to have more railroad competition than the northern plains area.

Shipment size can also influence railroad costs and, therefore, rates. Loading more cars at one time increases efficiency and reduces a railroad's costs. From 1997 through 2000, the average shipment size for wheat continued to be higher in the central plains than in the northern plains. For example, the average shipment size for wheat from the Wichita economic area from 1997 through 2000 was about 88 railcars, as compared with about 43 railcars for wheat shipments from the Great Falls economic area. In both instances, the average shipment size increased in the 1997 through 2000 period as compared with the 1990 through 1996 period—by about 17 railcars for wheat shipments from the Wichita area (from about 71 railcars to about 88 railcars) and by about 5 railcars for wheat shipments from the Great Falls area (from about 38 railcars to about 43 railcars). As discussed above, rates in the central plains states were typically lower than those in the northern plains states for the routes we examined.

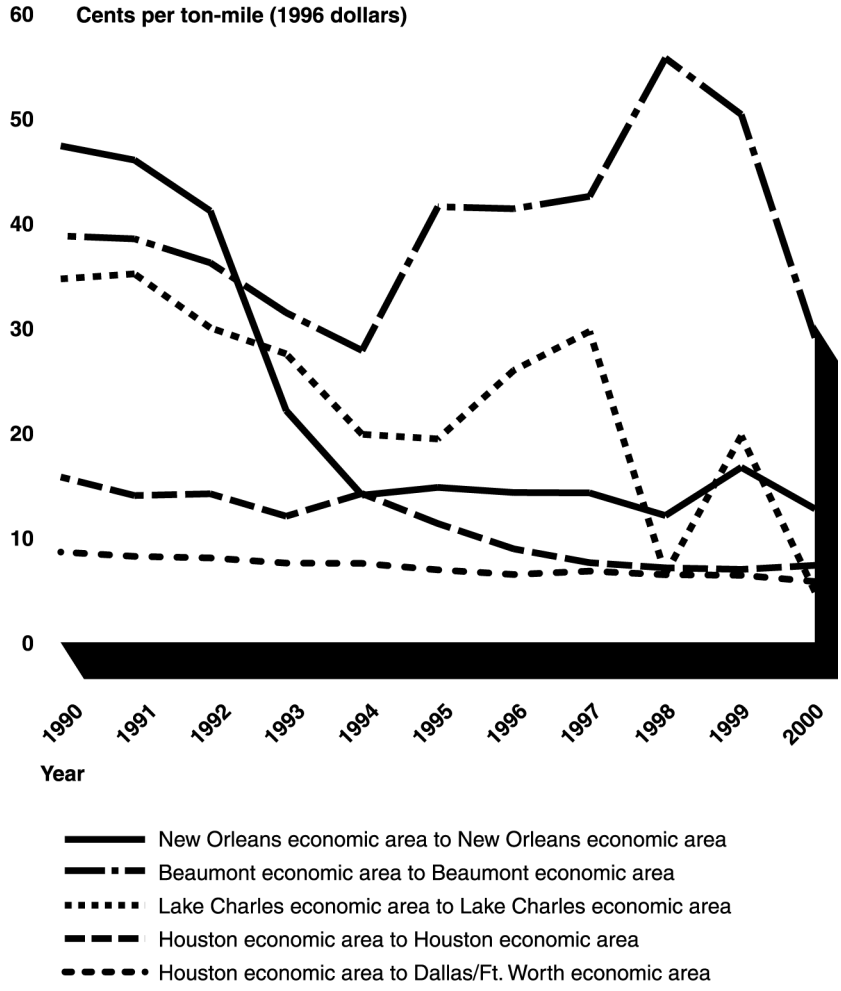
Chemicals and Transportation Equipment

Real rail rate changes for chemical and transportation equipment (motor vehicles and motor vehicle parts) shipments were mixed for the 1997 through 2000 period for the markets we reviewed—some rates fell while others stayed the same or increased. These trends can be seen in short-distance (500 miles or less) shipments of plastics.[23] (See fig. 5.) Two of the more notable trends are shipments within the Beaumont, Texas, and Lake Charles, Louisiana, economic areas. In the Beaumont economic area, real rail rates increased from 42.6 cents per ton-mile in 1997 to 55.8 cents in

[23]Appendix IV contains illustrations of real rail rates for chemicals and transportation equipment shipments in other distance categories.

1998 before falling to 29.1 cents in 2000. In the Lake Charles economic area, rail rates increased from 25.9 cents per ton-mile in 1996 to 29.7 cents per ton-mile in 1997 before falling (by about 78 percent) to 6.5 cents per ton-mile in 1998. After increasing again in 1999, the rates decreased to 4.8 cents per ton-mile in 2000 on this route. Rates in the other markets generally stayed about the same or decreased. While it is not clear why these rates changed the way they did, the changes came at the time (1997–1998) of a severe service crisis in the Houston/Gulf Coast area. Board officials said that generally, in their view, it did not appear that railroads used rail rates to allocate resources during the service crisis; they suggested that the erratic nature of the year-by-year rate changes reported for certain of these intra-terminal movements (which, according to the board, tend to be small shipment sizes) may have been related to the heterogeneous nature of this chemicals traffic and to the low sampling rates for smaller shipment sizes—1 in 40 waybills for movements of 1 to 2 car shipments, and 1 in 12 waybills for 3 to 15 car shipments—in the stratified *Carload Waybill Sample*.

Figure 5: Real Rail Rates for Plastic Materials or Synthetic Fibers, Resins, or Rubbers, Selected Short-Distance Routes, 1990–2000

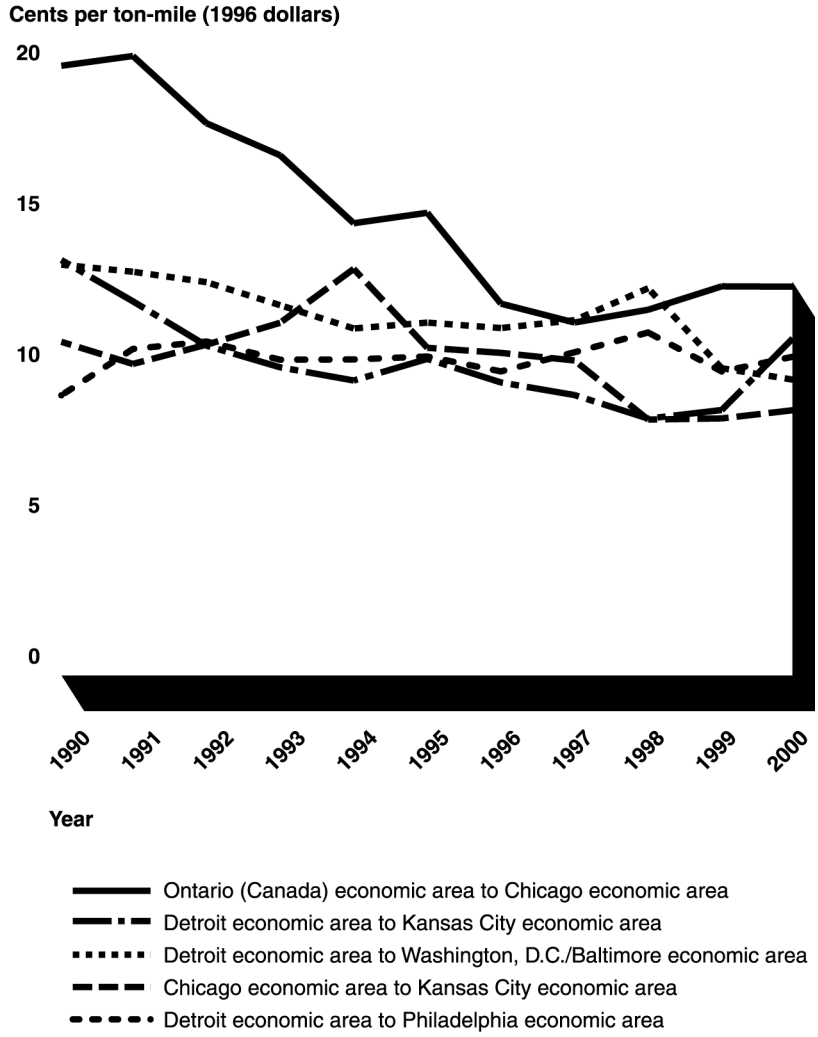


Source: GAO's analysis of the Surface Transportation Board's data.

Real rail rates for shipments of finished motor vehicles and motor vehicle parts or accessories also showed a variety of trends. In 1999, we reported that one of the more dramatic changes in rates was for the transportation of finished motor vehicles from Ontario, Canada, to Chicago. (See fig. 6.) The rates on this route decreased about 40 percent between 1990 and 1996. Since that time, the rates on this route have largely stabilized at about 12 cents per ton-mile, with a slight increase between 1997 and 2000. In general, rail rates for the transportation of motor vehicle parts or

accessories on both long- and medium-distance routes decreased. The notable exception is rates for the transportation of motor vehicle parts or accessories between the Detroit, Michigan, and Dallas, Texas, economic areas. On this route, the rates generally increased from about 9 cents per ton-mile in 1997 to about 22 cents per ton-mile in 2000—about a 139 percent increase. Most traffic in motor vehicles and motor vehicle parts or accessories is either under contract or exempt from economic regulation. Use of contracts suggests that rate decreases may be related to price discounts offered in return for guaranteed volumes of business. However, board officials noted that in recent years, railroads have increasingly been offering motor vehicle manufacturers service packages in which railroads provide premium service for higher rates. This may account for rate increases on specific routes.

Figure 6: Real Rail Rates for Motor Vehicles, Selected Medium-Distance Routes, 1990–2000



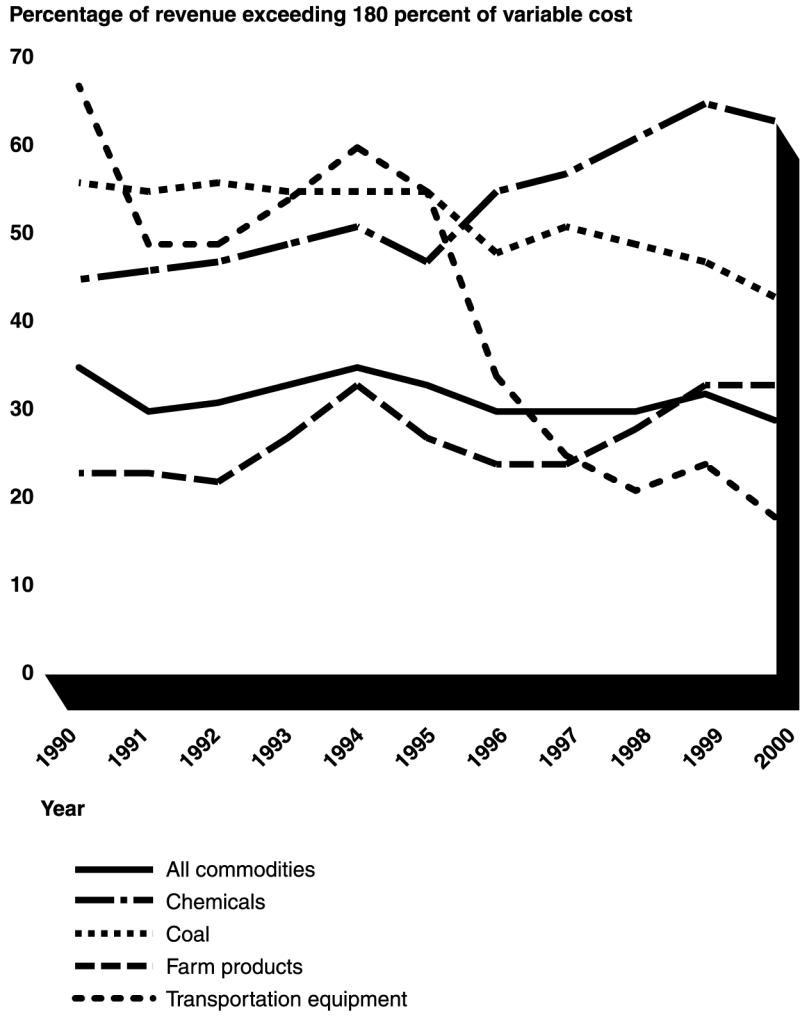
Source: GAO's analysis of the Surface Transportation Board's data.

Proportion of Rail Industry Revenues Exceeding 180 Percent of Variable Costs Generally Were Stable

Between 1997 and 2000, the proportion of all railroad revenue that came from shipments transported at rates that generated revenues exceeding 180 percent of variable costs stayed relatively constant at just under 30 percent. (See fig. 7.) This result is about 2 percentage points less than the average for the 1990–1996 period. In addition to being a jurisdictional threshold for the board to review the reasonableness of rates, revenue-to-variable cost ratios are sometimes used as indicators of shippers' captivity to railroads. If used in this way, the higher the R/VC ratio, the more likely it is that a shipper can use only rail to meet its transportation needs. [24]

[24]Generally, greater competition results in lower rates charged for goods and services. In a competitive market, producers will offer goods or services if, over the short term, they can at least recover those costs that vary with the level of production.

Figure 7: Percentage of Rail Industry Revenue Exceeding 180 Percent of Variable Costs for Selected Commodities, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

Individual commodity results differed markedly. In 2000, 62 percent of chemicals (which include potassium, sodium, and plastics) and 42 percent of coal were transported at rates generating revenues exceeding 180 percent of variable costs.[25] However, only 17 percent of transportation equipment (which includes motor vehicles and motor vehicle parts or accessories) and 32 percent of farm products (which includes wheat and corn) were transported at rates above this level. Board officials suggested that the comparatively high and rising R/VC ratios for chemicals traffic is likely attributable in part to the fact that the railroads' greater liability exposure associated with transporting hazardous materials is not reflected in the costs attributable to this traffic under the board's rail costing system. Board officials told us that higher rail rates for transporting hazardous chemicals are reflected in higher revenues for a railroad. However, additional costs incurred because of the higher liability exposure (such as court judgments against a company and set asides for future claims) are shown as special or extraordinary charges that do not become part of the variable costs of a movement in the board's rail costing system.

In contrast to the fairly constant overall proportion of goods shipped with revenues exceeding 180 percent, the results for four broad classes of commodities decreased or increased noticeably. For example, the proportion of farm products transported at above 180 percent R/VC increased from 23 percent to 32 percent from 1997 through 2000, following an increase from 1990 to 1994 (from 22 to 32 percent) and a decline from 1994 to 1996 (from 32 to 23 percent). The proportion of coal shipped above this ratio decreased from 50 percent to 42 percent from 1997 through 2000, continuing a gradual overall decrease from 1990.

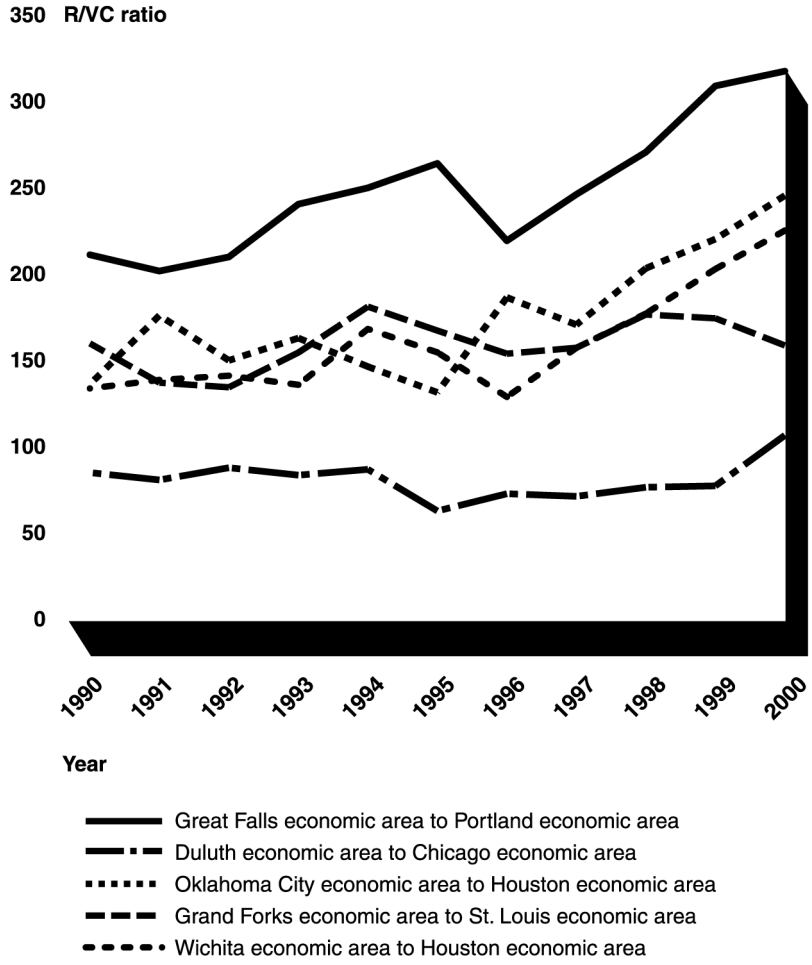
In some instances, the average R/VC ratios for the 1997–2000 period were considerably higher or lower than the average R/VC ratios for the 1990–1996 period. For example, the largest increase in average R/VC ratios for the routes that we reviewed was for medium-distance shipments of plastics from the Houston, Texas, economic area to the Little Rock, Arkansas, economic area. On this route, the average R/VC ratio increased by about 64 percentage points—from an average of 154 percent (1990–1996) to an average of 218 percent (1997–2000). The R/VC ratio on this route peaked at 250 percent in 1999. The R/VC ratio on this route was generally increasing while the rail rate was generally decreasing, suggesting that both rates and

[25]Consistent with our 1999 report, we examined changes in R/VC ratios for broader categories of products than we did for changes in rates.

variable costs were decreasing and that railroads did not pass on all cost reductions to customers in the form of rate reductions. In contrast, the largest decrease in average R/VC ratios for the routes we examined was about 116 percentage points, which occurred for motor vehicle shipments between the Chicago economic area and the Dallas economic area—from an average of 240 percent (1990–1996) to an average of 124 percent (1997–2000). Over this latter period, rail rates on this route decreased from about 8.7 cents per ton-mile in 1997 to about 8 cents per ton-mile in 2000. This suggests that variable costs increased during this period.

The R/VC ratios we observed are consistent with railroads' ability to use differential pricing, and they are sensitive to competition. For example, over the 1997–2000 period and the 1990–1996 period, the R/VC ratio for medium-distance shipments of wheat from the Great Falls economic area (a northern plains location) exceeded those for wheat shipments from the Wichita, Oklahoma City, and Duluth economic areas for the specified destinations. (See fig. 8.) There are fewer potentially competitive alternatives to rail in the northern plains states. In contrast, shipments originating in the central plains states (for example, from Wichita and Oklahoma City) are considered by some to have more alternatives to rail than in the northern plains. Duluth (a northern plains origin) offers a competitive alternative of transportation by water. The anomaly appears to be medium-distance wheat shipments originating in the Grand Forks, North Dakota, economic area (a northern plains origin) transported to the St. Louis, Missouri, economic area. The R/VC ratio for this route, although consistently above the R/VC ratio for shipments from the Duluth economic area (with potential water competition), was generally below that of Wichita and Oklahoma City (with potentially more rail competition) from 1997 through 2000. This suggests that wheat shipments on this route may have been sensitive to barge competition from the Mississippi River or rail competition in the central plains states or the Midwest.

Figure 8: R/VC Ratios for Medium-Distance Shipments of Wheat, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

The use of R/VC ratios has limitations. In particular, the ratios are subject to misinterpretation because they are simple divisions of revenues by variable costs. It is possible for rates paid by shippers to be dropping while the R/VC ratio is increasing—a seemingly contradictory result. For example, if revenues (which are the rates paid by shippers) are $2 and variable costs are $1, then the R/VC ratio is 200 percent. If costs decrease by 50 cents and railroads pass this cost decrease on to shippers by decreasing rates by 50 cents, the R/VC ratio becomes 300 percent. Therefore, by itself, the R/VC ratio could suggest that railroads are using

their market power to make shippers worse off when this might not be the case. Board officials suggested that the R/VC ratio shown in figure 8 for the movement of wheat from the Great Falls economic area to the Portland economic area is one such instance of this. In this case, rail rates from Great Falls generally decreased over the 1997 through 2000 period from about 3.5 cents per ton-mile in 1997 to about 3.2 cents per ton-mile in 2000. Board officials said unit costs were also decreasing, in part, because of increases in shipment size and various carrier-specific productivity improvements related to the 1995 Burlington Northern Railroad merger with the Atchison Topeka & Santa Fe Railway Company. The R/VC ratio on this route increased from 240 percent in 1997 to 308 percent in 2000. Similarly, using the example above, if variable costs increase by 50 cents (from $1 to $1.50) and railroads increase their rates by the same amount (from $2 to $2.50), then the R/VC ratio becomes 167 percent. Again, the R/VC ratio alone would suggest that shippers are better off—because the R/VC ratio decreased from 200 percent—when this might not necessarily be the case.

Although R/VC ratios have limitations, they can be useful indicators of railroad pricing and of whether railroads may be using their market power to set rates. As described previously, the R/VC ratio is a jurisdictional threshold for the Surface Transportation Board to consider rate relief cases. The board uses other analytical techniques to determine whether rates are reasonable.

Agency Comments and Our Evaluation

We provided a draft of this report to the Surface Transportation Board and the Department of Transportation for their review and comment. The board provided its comments in a meeting that included its general counsel and chief economist. In general, the board agreed with the material presented in our draft report and stated that it accurately portrayed rail rate trends over the period of our study. It said that the overall trend of declining rates that we found is consistent with studies and analyses prepared by the board. Board officials said that, while it can be difficult to identify with specificity the reasons why rail rates might change in the short run, especially rates for specific commodities over specific routes, the draft report did an admirable job in discussing factors that could influence rate changes. Among the specific comments made were (1) that low rail rates have allowed Western coal to penetrate Eastern coal markets and (2) that R/VC ratios for chemicals may not fully reflect the costs of increased liability exposure faced by railroads in transporting hazardous chemicals. We made changes to the report to reflect the board's comments.

The board offered additional clarifying, presentational, and technical comments that, with few exceptions, we incorporated into our report.

The Department of Transportation, in oral comments made by the director, Office of Intermodal Planning and Economics, Federal Railroad Administration, said that the report fairly and accurately portrayed the changes in railroad freight rates over the study period, and that rail rates were responsive to market conditions and competition. The department suggested that our Results in Brief section should indicate that R/VC ratios cannot be relied upon as measures of railroad market power. We modified the Results in Brief to provide a fuller discussion of R/VC limitations.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 21 days after the date of this letter. At that time, we will send copies of this report to congressional committees with responsibilities for freight railroad competition issues; the administrator, Federal Railroad Administration; the chairman, Surface Transportation Board; and the director, Office of Management and Budget. We will also make copies available to others upon request. This report will also be available on our home page at http://www.gao.gov.

If you or your staff have any questions about this report, please contact either James Ratzenberger at ratzenbergerj@gao.gov or me at heckerj@gao.gov. Alternatively, we may be reached at (202) 512-2834. Key contributors to this report were Stephen Brown, Richard Jorgenson, and James Ratzenberger.

Sincerely yours,

JayEtta Z. Hecker
Director, Physical Infrastructure Issues

Scope And Methodology

As for our 1999 report, we used the board's *Carload Waybill Sample* to identify railroad rates from 1997 through 2000 (the latest data available at the time of our review), which we then analyzed to determine rate changes. The *Carload Waybill Sample* is a sample of railroad waybills (in general, documents prepared from bills of lading authorizing railroads to move shipments and collect freight charges) submitted by railroads annually. We used these data to obtain information on rail rates for specific commodities in specific markets by shipment size and length of haul. According to board officials, revenues derived from the *Carload Waybill Sample* are not adjusted for such things as year-end rebates and refunds that may be provided by railroads to shippers who exceed certain volume commitments.

Some railroad movements contained in the *Carload Waybill Sample* are governed by contracts between shippers and railroads. To avoid disclosure of confidential business information, the board disguises the revenues associated with these movements before making this information available to the public. Consistent with our statutory authority to obtain agency records, we obtained a version of the *Carload Waybill Sample* that did not disguise revenues associated with railroad movements made under contract. Therefore, the rate analysis presented in this report presents a truer picture of rail rate trends than analyses that may be based solely on publicly available information. Since much of the information contained in the *Carload Waybill Sample* is confidential, rail rates and other data contained in this report that were derived from this database have been aggregated at a level sufficient to protect this confidentiality.

As in our 1999 report, we analyzed coal, grain (wheat and corn), chemicals (potassium and sodium compounds and plastic materials or synthetic fibers, resins, or rubber), and transportation equipment (finished motor vehicles and motor vehicle parts or accessories) shipments. These commodities represented about 52 percent of total industry revenue in 2000 and, in some cases, had a significant portion of their rail traffic transported on routes where the ratio of revenue to variable costs equaled or exceeded 180 percent.

We used rate indexes and average rates on selected corridors to measure rate changes over time. A rate index attempts to measure price changes over time by holding constant the underlying collection of items that are consumed (in the context of this report, items shipped). This approach differs from comparing average rates in each year because, over time, higher- or lower-priced items can constitute different shares of the items

consumed. Comparing average rates can confuse changes in prices with changes in the composition of the goods consumed. In the context of railroad transportation, rail rates and revenues per ton-mile are influenced, among other things, by average length of haul. Therefore, comparing average rates over time can be influenced by changes in the mix of long- and short-haul traffic. Our rate indexes attempted to control for the distance factor by defining the underlying traffic collection to be commodity flows occurring in 2000 between pairs of census regions.

To examine the rate trends on specific traffic corridors, we first chose a level of geographic aggregation for corridor endpoints. For grain, chemical, and transportation equipment traffic, we defined endpoints to be regional economic areas defined by the Department of Commerce's Bureau of Economic Analysis. For coal traffic, we used economic areas to define destinations and used coal supply regions—developed by the Bureau of Mines and used by the Department of Energy—to define origins. An economic area is a collection of counties in and about a metropolitan area (or other center of economic activity); there are 172 economic areas in the United States, and each of the 3,141 counties in the country is contained in an economic area. As in our 1999 report, we placed each corridor in one of three distance-related categories: 0–500 miles, 501–1,000 miles, and more than 1,000 miles. Although these distance categories are somewhat arbitrary, they represent reasonable proxies for short-, medium-, and long-distance shipments by rail.

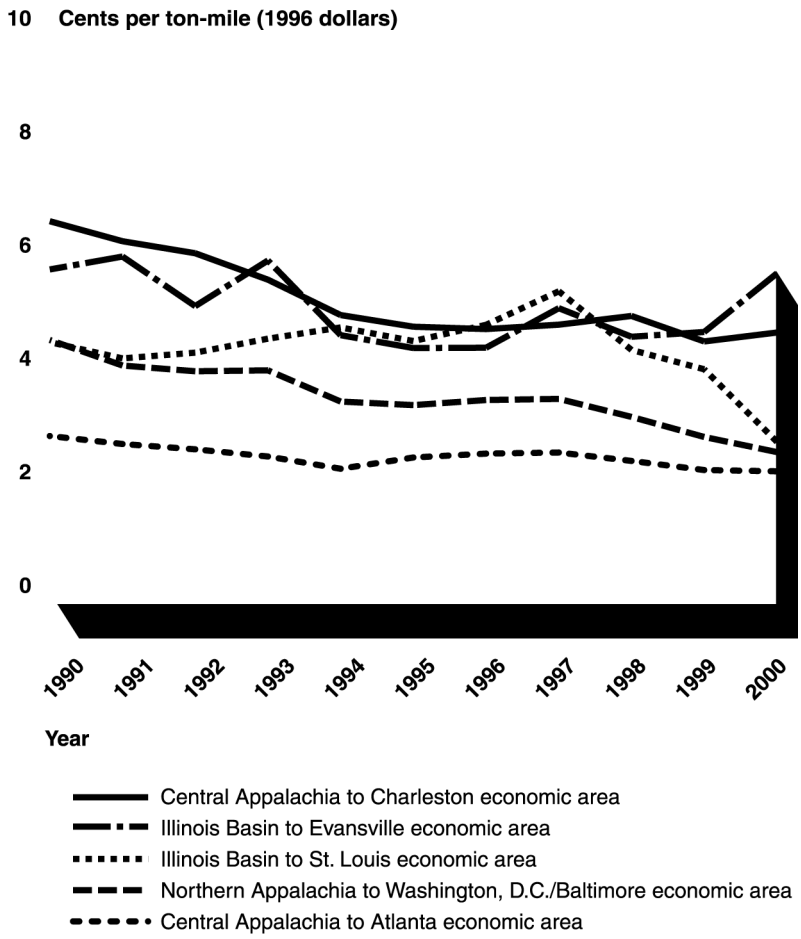
To address issues related to revenue-to-variable cost ratios we obtained data from the board identifying revenues, variable costs, and R/VC ratios for commodities shipped by rail at the two-digit Standard Transportation Commodity Code level. We used data from the *Carload Waybill Sample* to identify the specific revenues and variable costs and to compute R/VC ratios for the commodities and markets we examined. Using this information we then identified those commodities and markets whose R/VC ratios were consistently above or below the 180 percent R/VC level.

We performed our work from December 2001 through May 2002, in accordance with generally accepted government auditing standards.

Real Rail Rates for Coal

The following are real (inflation-adjusted) rail rates for coal shipments in the various markets and distance categories we reviewed. The distance categories are as follows: short is 0 to 500 miles, medium is 501 to 1,000 miles, and long is greater than 1,000 miles.

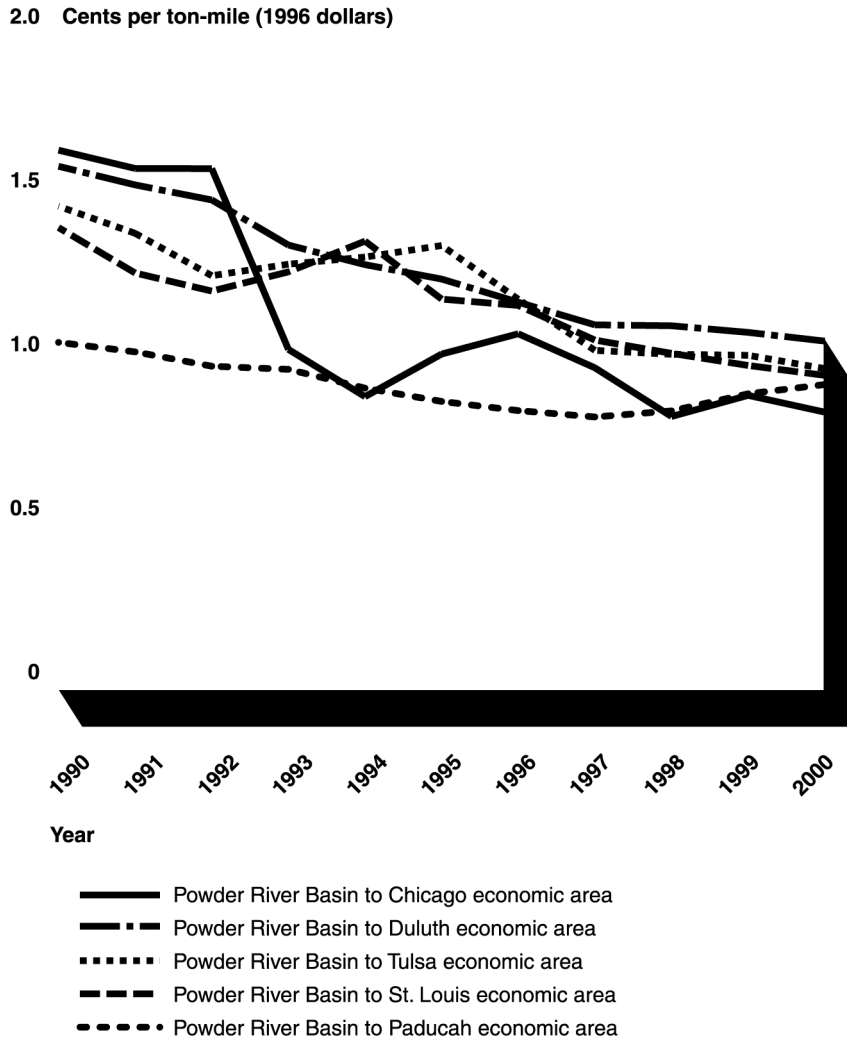
Figure 9: Real Rail Rates for Coal, Selected Short-Distance Routes, 1990–2000



Note: The Central Appalachia Coal Supply Region includes eastern Kentucky, Virginia, and southern West Virginia. The Northern Appalachia Coal Supply Region includes Maryland, Ohio, Pennsylvania, and northern West Virginia. The Illinois Basin Coal Supply Region includes western Kentucky, Illinois, and Indiana.

Source: GAO's analysis of the Surface Transportation Board's data.

Figure 10: Real Rail Rates for Coal, Selected Long-Distance Routes, 1990–2000



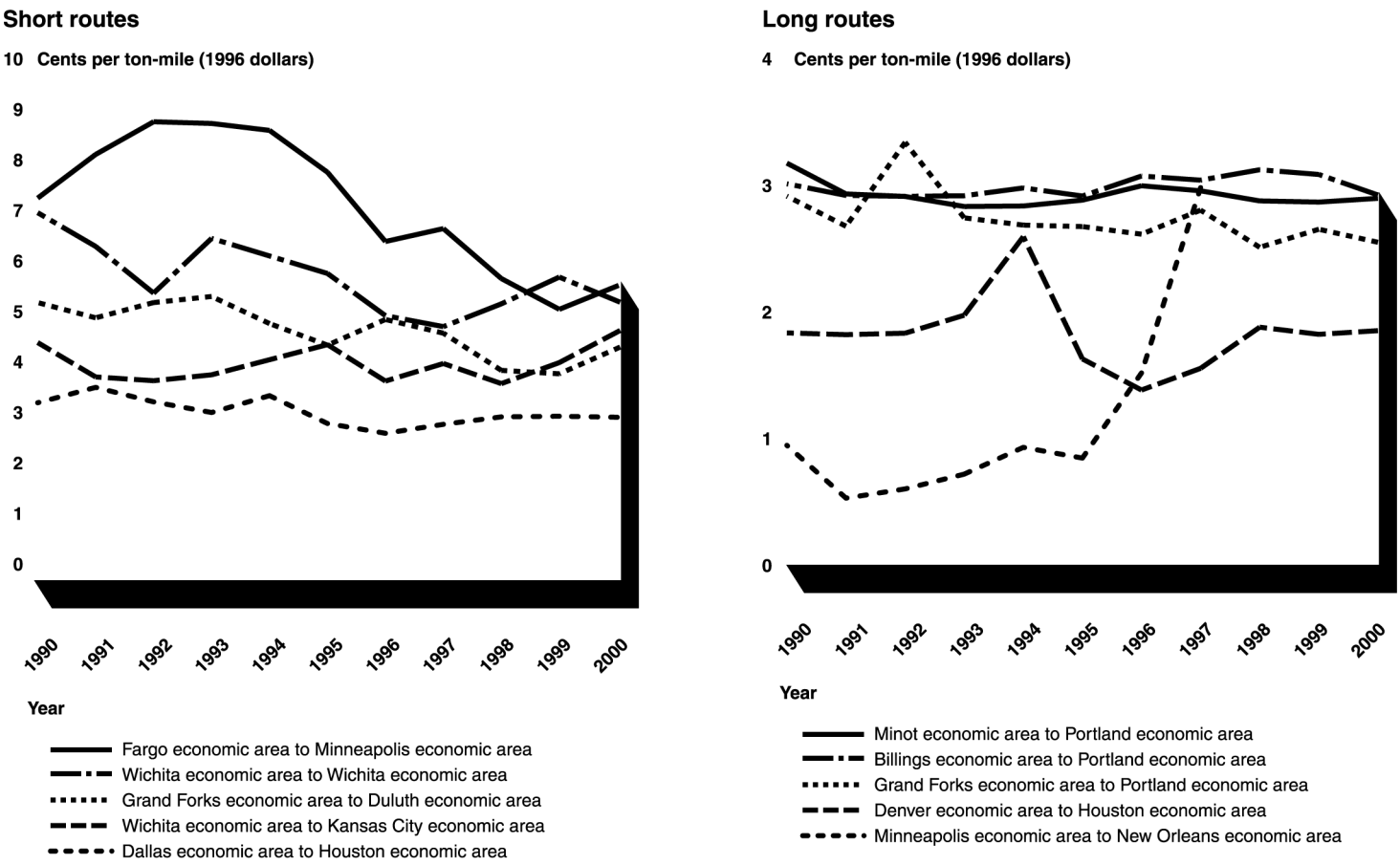
Note: The Powder River Basin Coal Supply Region includes Montana and Wyoming.

Source: GAO's analysis of the Surface Transportation Board's data.

Real Rail Rates for Wheat and Corn Shipments

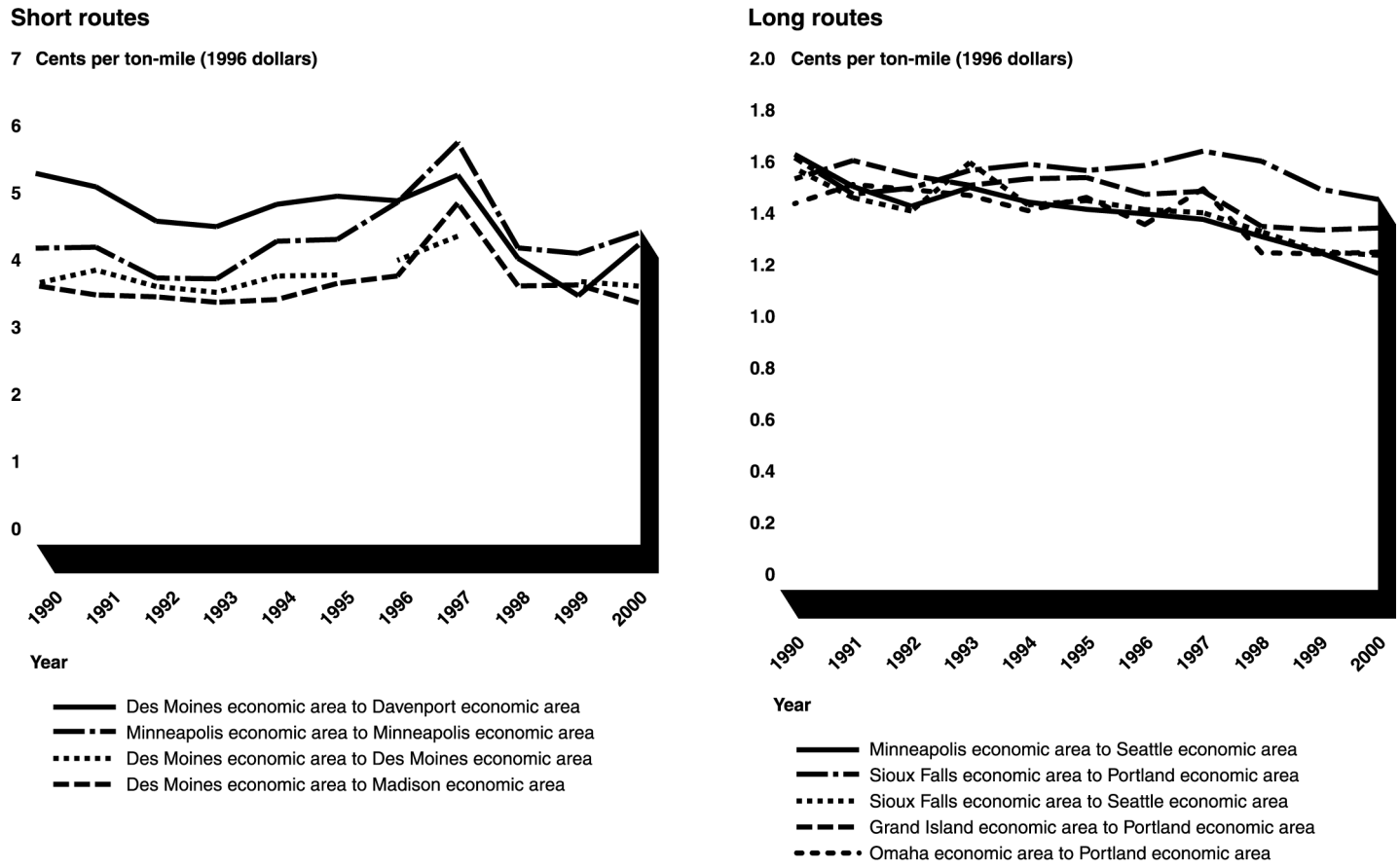
The following are real (inflation-adjusted) rail rates for wheat and corn shipments in the various markets and distance categories we reviewed. The distance categories are as follows: short is 0 to 500 miles, medium is 501 to 1,000 miles, and long is greater than 1,000 miles.

Figure 11: Real Rail Rates for Wheat, Selected Short- and Long-Distance Routes, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

Figure 12: Real Rail Rates for Corn, Selected Short- and Long-Distance Routes, 1990–2000



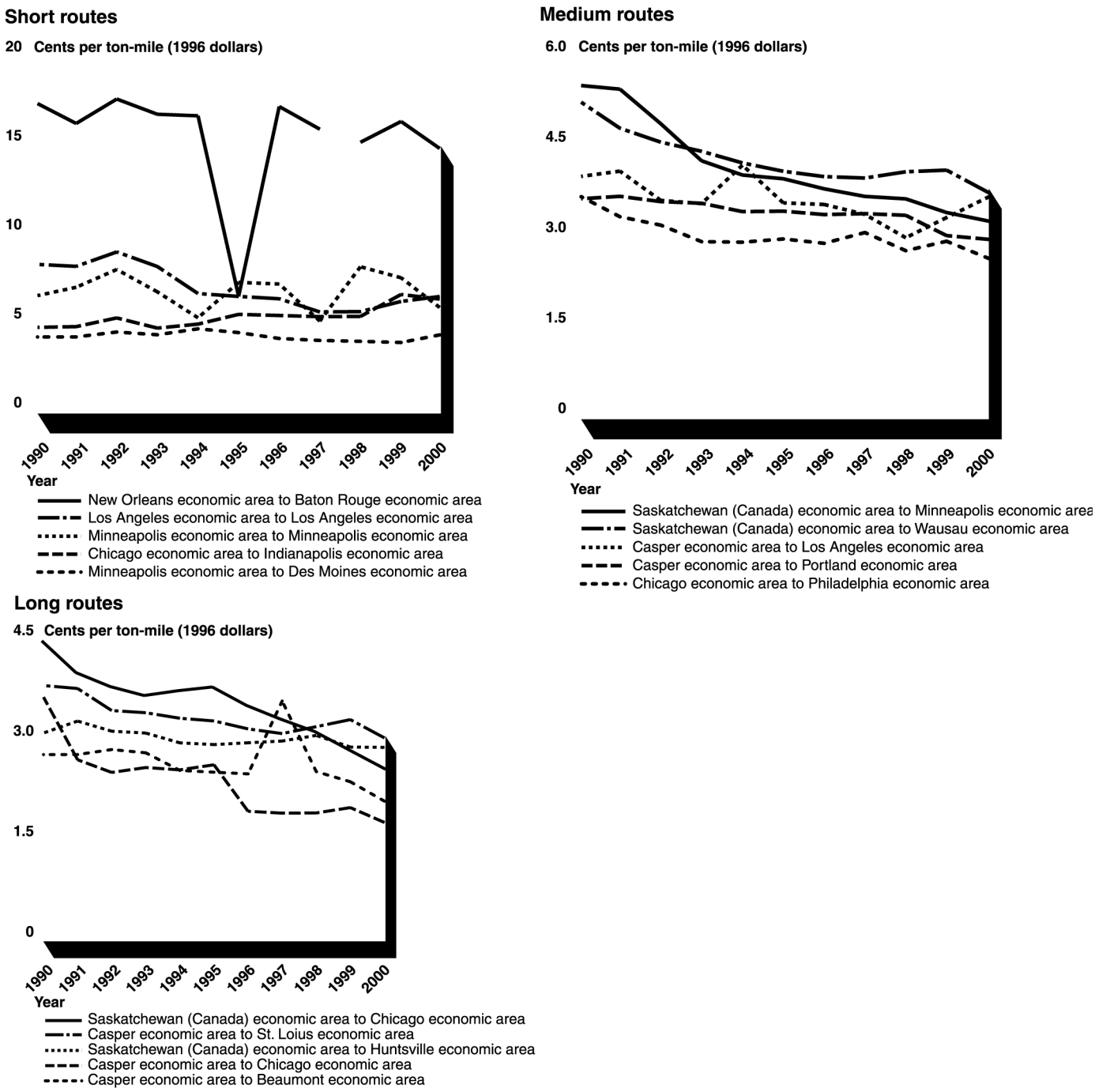
Note: For confidentiality, data points for 1996, 1998, and 1999 within the Des Moines economic area were excluded.

Source: GAO's analysis of the Surface Transportation Board's data.

Real Rail Rates for Chemicals and Transportation Equipment

The following are real (inflation-adjusted) rail rates for selected chemical and transportation equipment shipments in the various markets and distance categories we reviewed. The distance categories are as follows: short is 0 to 500 miles, medium is 501 to 1,000 miles, and long is greater than 1,000 miles.

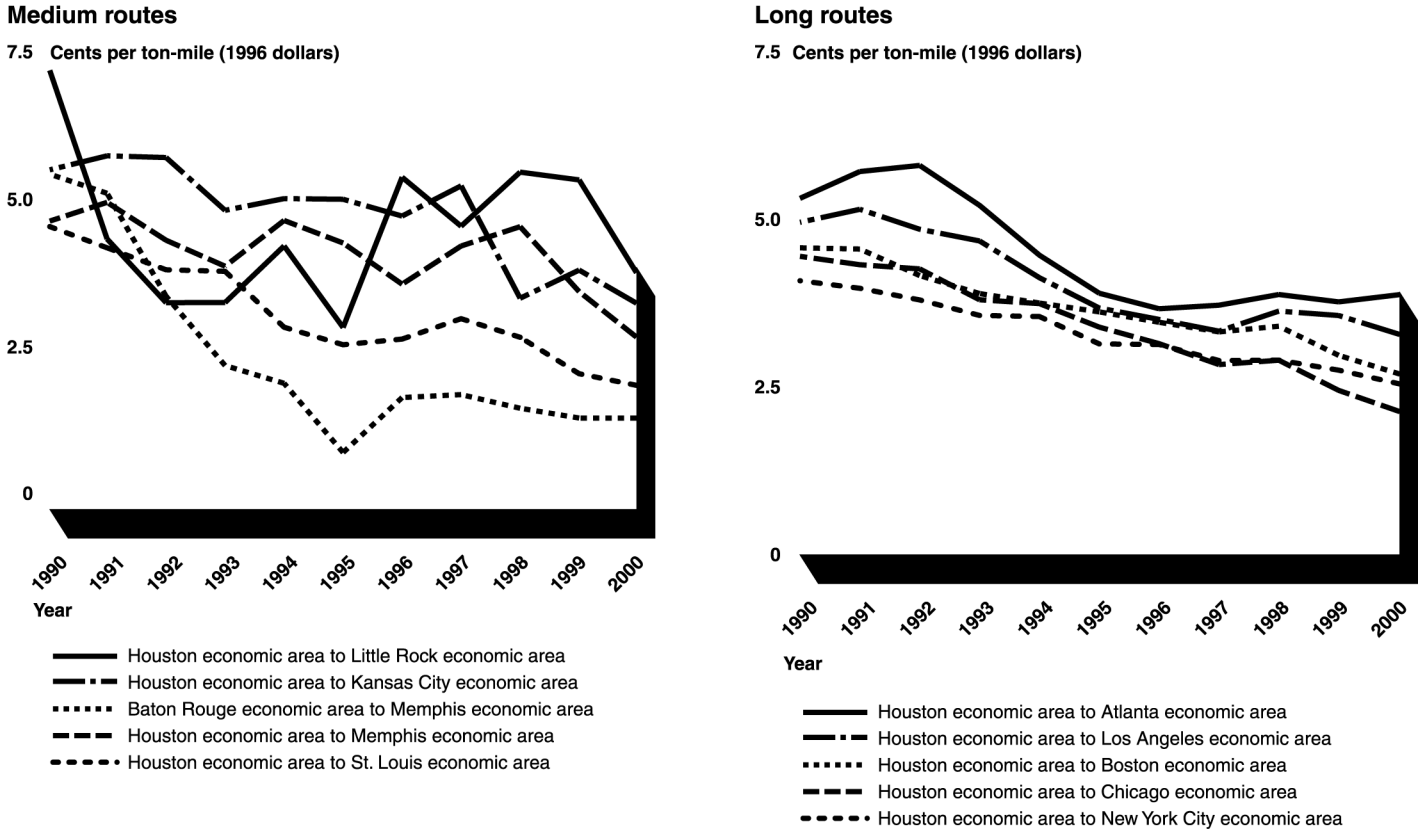
Figure 13: Real Rail Rates for Potassium/Sodium Compounds, Selected Short-, Medium-, and Long-Distance Routes, 1990–2000



Note: For confidentiality, the 1997 data point for the route from the New Orleans economic area to the Baton Rouge economic area was excluded.

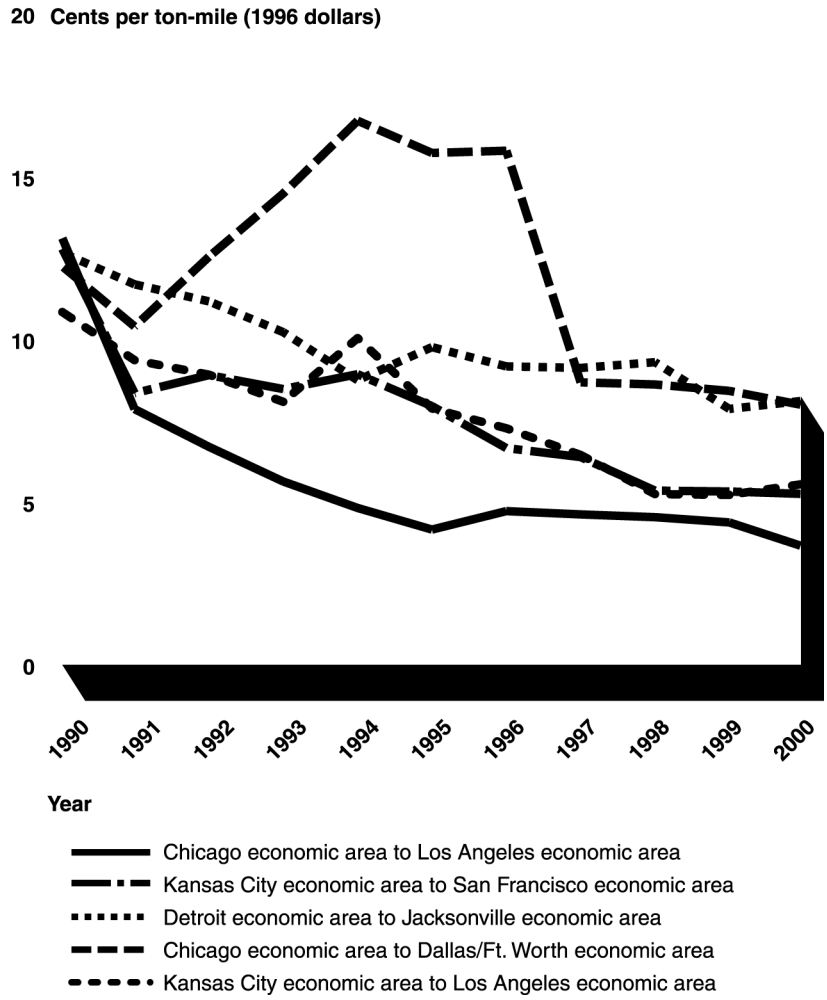
Source: GAO's analysis of the Surface Transportation Board's data.

Figure 14: Real Rail Rates for Plastic Materials or Synthetic Fibers, Resins, or Rubbers, Selected Medium- and Long-Distance Routes, 1990–2000



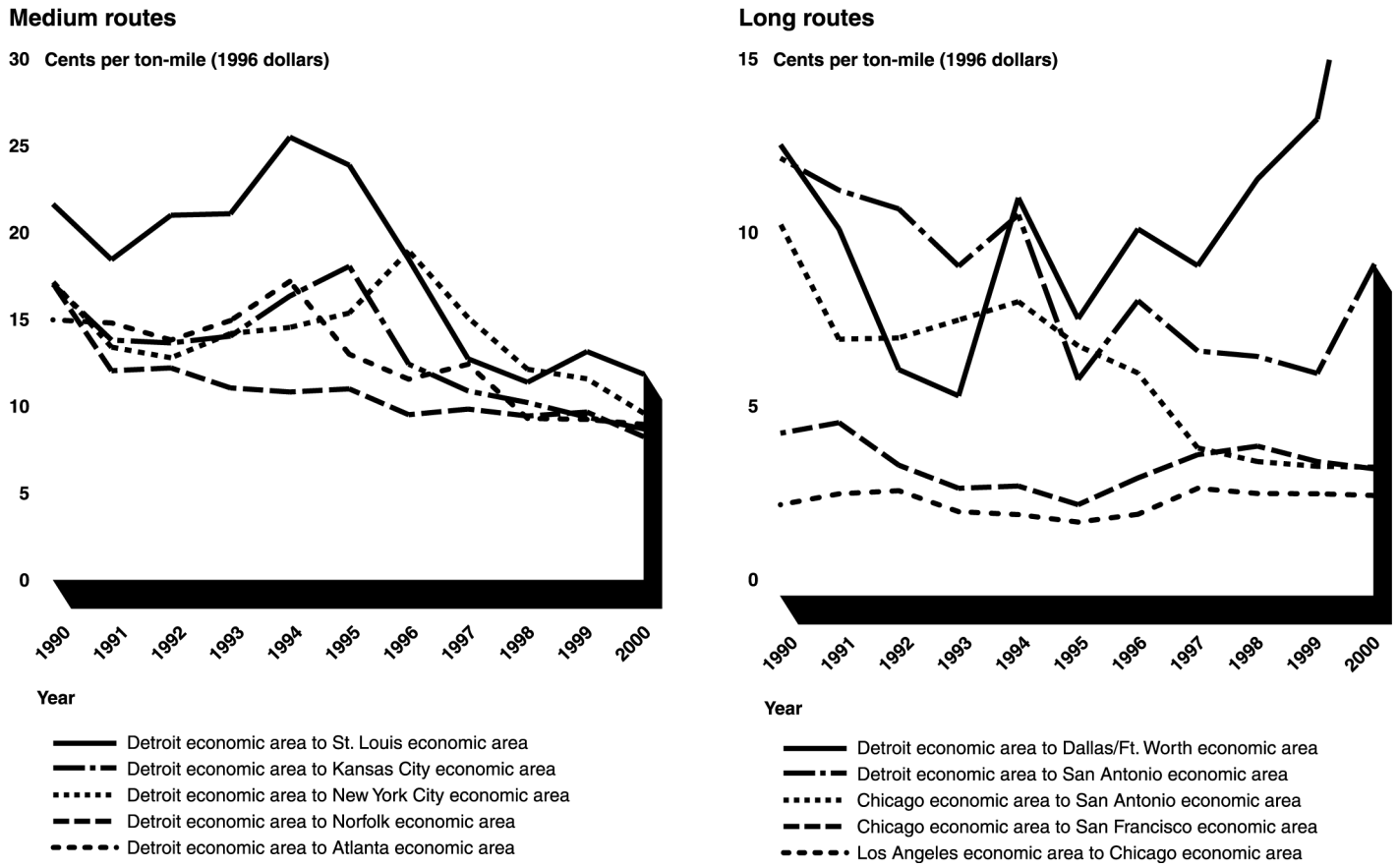
Source: GAO's analysis of the Surface Transportation Board's data.

Figure 15: Real Rail Rates for Motor Vehicles, Selected Long-Distance Routes, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

Figure 16: Real Rail Rates for Motor Vehicle Parts or Accessories, Selected Medium- and Long-Distance Routes, 1990–2000



Source: GAO's analysis of the Surface Transportation Board's data.

GAO's Mission

The General Accounting Office, the investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through the Internet. GAO's Web site (www.gao.gov) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select "Subscribe to daily E-mail alert for newly released products" under the GAO Reports heading.

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are $2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
TDD: (202) 512-2537
Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Public Affairs

Jeff Nelligan, managing director, NelliganJ@gao.gov (202) 512-4800
U.S. General Accounting Office, 441 G Street NW, Room 7149
Washington, D.C. 20548

PRINTED ON RECYCLED PAPER

United States
General Accounting Office
Washington, D.C. 20548-0001

Official Business
Penalty for Private Use $300

Address Service Requested

Presorted Standard
Postage & Fees Paid
GAO
Permit No. GI00