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Report to Congressional Requesters

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GRAIN SHIPMENTS

Agriculture Can Reduce Costs by Increased Use of Negotiated Rail Rates

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Chairman, Subcommittee on Department
Operations, Research, and Foreign Agriculture
Committee on Agriculture
House of Representatives

The Honorable Byron L. Dorgan
House of Representatives

In response to your October 17, 1985, request, we have reviewed the U.S. Department of Agriculture's (USDA) methods for shipping government grain on railroads nationwide—in particular, the extent to which it negotiates with railroads for rate discounts. The report contains recommendations aimed at improving USDA's negotiating effectiveness and reducing its rail transportation costs.

As arranged with your offices, unless you publicly announce its contents earlier, we will make no further distribution of the report until 15 days from the date of this letter. At that time, we will send copies to the Director, Office of Management and Budget; the Secretary of Agriculture; and other interested parties.

This work was performed under the direction of Brian P. Crowley, Senior Associate Director. Other major contributors are listed in appendix II.

Neal P. Curtin for

J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

The U.S. Department of Agriculture (USDA), responsible for storing and transporting government-owned grain, is one of the nation's largest shippers of grain by rail. In 1985 it shipped about 215.5 million bushels of grain by rail at a cost of about $55.5 million.

In response to a congressional request, GAO reviewed the methods that USDA uses to ship government grain by rail. GAO reviewed, among other things, the (1) extent to which USDA negotiates rate and service concessions with railroads, especially in comparison with private grain shippers and other government agencies; (2) savings resulting from negotiations; (3) constraints that keep USDA from negotiating more often; and (4) methods private shippers and other government agencies use to increase their negotiating effectiveness.

Background

In recent years USDA has accumulated large inventories of grain. To store this grain, USDA leases space in thousands of grain elevators throughout the country.

The grain is transported, primarily by rail, (1) between elevators to provide space for local farmers' grain after harvest and (2) to ports or domestic distribution points to fulfill federal commitments.

Since rail deregulation in 1980, one of the most significant changes in the industry is that carriers are now permitted to negotiate rail rates with shippers. Unless negotiated, rates are based, as they were prior to deregulation, on prescribed tariffs that contain point-to-point rates for all origins and destinations in the United States.

Grain inventory management is the responsibility of USDA's Commodity Credit Corporation, a wholly owned government corporation. The corporation has no operating staff; its day-to-day activities (including grain transportation) are carried out by USDA's Agricultural Stabilization and Conservation Service (ASCS).

Results in Brief

Although ASCS negotiated for rate and service concessions on about 10 percent of its 1985 rail grain shipments (or on about 21 percent of its total grain tonnage), its negotiation activities have lagged considerably behind those of other shippers. Consequently, ASCS may have missed opportunities for potentially substantial cost savings. Available information indicates that the savings on private grain shipments and ASCS' negotiated shipments were considerable.

ASCS officials cited a number of constraints that they believed lessened ASCS' negotiating effectiveness. However, these constraints for the most part have been dealt with by other shippers, and GAO believes that ASCS can find ways of mitigating them.

Private grain shippers and other government agencies have strengthened their transportation planning processes, increased their use of automation, and developed negotiating and marketing skills and expertise to enable them to compete more effectively. ASCS has done little in any of these areas to improve its negotiating effectiveness. ASCS negotiations are performed on an ad hoc basis—ASCS does not have any written policy or criteria governing when its transportation specialists should negotiate or any system for evaluating the effectiveness of its negotiating activities.

As a result, ASCS has not effectively used a significant asset—its traffic leverage—to achieve maximum savings. As one of the nation's largest grain shippers, ASCS is in a good position to award traffic to carriers in exchange for lower rates and improved service. However, to use its leverage effectively, ASCS must develop a strategy for managing its rail shipments systematically.

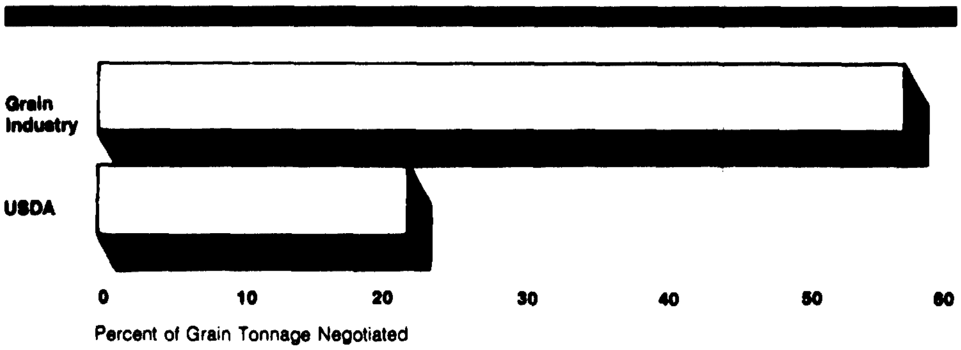
Principal Findings

Negotiated Shipments

In 1985 about 10 percent of ASCS' approximately 4,000 grain shipments were negotiated (or about 21 percent of its total grain tonnage). Negotiations occurred more often for larger shipments. ASCS transportation specialists told GAO that they negotiated larger shipments because they believe such shipments provide railroads with greater incentive to negotiate.

In contrast, the Association of American Railroads reported in mid-1985 that about 57 percent of all private sector grain tonnage was moving under negotiated rates.

Figure 1: Rail Negotiating Activity: USDA and Grain Industry (1985)



Negotiating Constraints

The negotiating constraints that ASCS officials cited were (1) inability to predict shipment volumes, (2) lack of personnel, (3) lack of bargaining leverage, (4) lack of adequate notice as to when grain was to be shipped, (5) lack of data on contract rates paid by other shippers, (6) limited ability to control movements, and (7) restrictions created by certain tariff provisions. However, these constraints have been largely dealt with by other shippers, and GAO believes they can be mitigated by management actions to improve ASCS' negotiating effectiveness. (See ch. 2.)

Savings From Negotiated Rates

Although precise savings cannot be calculated, indications are that considerable savings are possible if ASCS negotiated more often. GAO's review of seven 1985 ASCS-negotiated shipments from Kansas to the Gulf showed an average savings of 29 percent over published tariff rates. In addition, a USDA study, covering October 1980 through October 1983, estimated that private sector grain shippers with negotiated rail rates from Kansas to the Gulf saved an average of 17 percent over published rates. Summary information that GAO obtained from the Interstate Commerce Commission on 1985 private grain shippers' contracts from Kansas and North Dakota also showed substantial savings. For example, on 22 contracts providing for refunds on grain shipments of 1 carload and over, savings ranged from $75 to over $600 a car. (See ch. 2.)

ASCS Response to Deregulation

While other shippers have made changes in response to deregulation, ASCS has not reacted as quickly. Other shippers' actions have included strengthening transportation planning systems to improve negotiating leverage; using automation to develop information on traffic patterns, rail rates, and carrier costs; and developing expertise in such areas as negotiating and marketing. Such expertise enables shippers to negotiate more successfully for lower rates and desired services. (See ch. 3.)

ASCS' transportation planning process is minimal—shipments are negotiated on a shipment-by-shipment basis; transportation management functions are not automated; and ASCS has neither provided formal training to its transportation specialists nor used outside expertise to supplement staff skills. (See ch. 3.)

In addition, ASCS does not have (1) written policy or criteria specifying when its transportation specialists should negotiate or (2) a system for tracking negotiations and monitoring its transportation specialists' performance. Without such measures, ASCS can neither assure a consistent approach to negotiations nor evaluate its negotiating effectiveness. (See chs. 2 and 3.)

Recommendations

GAO recommends that the Secretary of Agriculture direct the Administrator, ASCS, to develop a rail negotiation policy setting forth ASCS' goals and strategy for managing rail shipments, an automated management information system, and additional skills and expertise necessary to take optimal advantage of savings available in the current deregulated environment. (See ch. 4.)

Agency Comments

ASCS agreed with the general thrust of GAO's report and with the conclusion that ASCS should increase its use of negotiated rates. ASCS stated that to improve its negotiating effectiveness, it has recently hired additional transportation specialists, is automating transportation rate information to assist personnel involved in the negotiating process, and is assessing training needs. ASCS also noted that its negotiations with railroads increased in 1986 and that it had saved about $21 million in freight costs through negotiations from January to November 1986.

GAO believes these actions are steps in the right direction. However, to fully realize the cost savings available through increased negotiations, ASCS needs to use its traffic leverage more effectively by taking better advantage of its position as one of the nation's largest grain shippers. Implementing the recommendations in this report will help ASCS accomplish this. (See ch. 4.)

Contents

Abbreviations

AAR	Association of American Railroads
ASCS	Agricultural Stabilization and Conservation Service
CCC	Commodity Credit Corporation
DOD	U.S. Department of Defense
GAO	General Accounting Office
ICC	Interstate Commerce Commission
KCCO	Kansas City Commodity Office
TVA	Tennessee Valley Authority
RCED	Resources, Community, and Economic Development Division
USDA	U.S. Department of Agriculture

Introduction

The U.S. Department of Agriculture (USDA) acquires nonperishable commodities, including bulk grains,[1] as part of its price-support program. Authority for the program stems from the Agriculture Act of 1949, as amended (Public Law 81-439), which authorizes government support of about a dozen commodities. These commodities are designated by law for mandatory price support under rates or formulas established by the Congress. USDA's price-support activities are the responsibility of the Commodity Credit Corporation (CCC), a wholly owned government corporation acting within USDA. CCC has no operating staff; its day-to-day activities are carried out by staff of USDA's Agricultural Stabilization and Conservation Service (ASCS).

CCC acquires grain under the price-support program's nonrecourse loan operations. Under the program, eligible farmers obtain loans from CCC using their commodities as collateral. Farmers may redeem their commodities by paying off the loans with interest. If the farmer does not repay the loan before it matures (usually within 9 to 12 months), CCC takes title to the commodity as full payment. In recent years, CCC grain inventories have increased substantially because market prices have often been below loan levels, and many farmers have chosen to forfeit their collateral instead of repaying the loans.

The government stores its surplus commodities in warehouse space it leases from private firms. In early 1986 USDA had storage agreements with about 5,000 grain warehouses (grain elevators) throughout the country.

By law CCC has, for the most part, been constrained from selling surplus grain on the domestic market.[2] Instead, it reduces grain inventories primarily through foreign and domestic food donations and subsidy programs, such as the Food for Peace Program (Public Law 480), the Emergency Feed Assistance Program, and the Export Enhancement Program. These programs involve donations and concessional sales of agricultural commodities to other nations (Public Law 480), provision of feed grains in areas faced with catastrophes (emergency feed assistance), and subsidies-in-kind to U.S. grain exporters to expand sales in targeted foreign trade areas (export enhancement).

[1] Wheat, corn, soybeans, grain sorghum, rye, oats, and barley.

[2] CCC generally cannot sell government-owned grain at less than 110 percent of current price levels. (See 7 U.S.C.1445(e)(f)(1982).) Under the Food Security Act of 1985, USDA may make a portion of its direct payments, under various commodity programs, with CCC-owned commodities rather than cash.

Transportation of Government-Owned Grain

Government-owned grain is transported from storage warehouses primarily under three circumstances—(1) delivery to ports for export, (2) delivery to domestic distribution points to fulfill program commitments, and (3) reconcentration. Reconcentration occurs when a grain elevator operator asks ASCS to move government-owned grain to another elevator before harvest. This gives the first elevator additional storage space to accommodate the needs of local farmers. ASCS locates available storage space and pays for handling and transportation charges associated with the movement. An ASCS official estimated that about 70 percent of ASCS' grain movements are for reconcentration and 30 percent are to accommodate domestic program needs and export requirements.

Most grain production is concentrated in the Plains and North Central states;[3] and responsibility for acquiring, handling, storing, and transporting government-owned grain resides with ASCS' Kansas City Commodity Office (KCCO). KCCO activities are coordinated under the policy guidance of the ASCS Administrator.

Most of CCC's grain moves by rail. In the grain industry, truck and barge transportation sometimes substitutes for rail. However, the distances between origins (grain production and storage points) and destinations (grain markets, millers, and ports) are often great, effectively eliminating trucks as an economically feasible alternative;[4] truck capacity is limited and cannot totally handle large movements of grain; and grain production points are often inland, far from the navigable waterways necessary for barge transport.

According to USDA officials, the federal government is one of the largest grain shippers in the United States. In 1985 ASCS shipped about 215.5 million bushels of grain by rail, about 4,000 separate shipments. The number of ASCS rail shipments, as well as the associated costs, has increased in recent years, due largely to the increasing amount of surplus grain in storage. However, in the grain industry overall, grain shipments by rail dropped 17 percent in 1985 from the previous year, due primarily to the depressed farm economy.

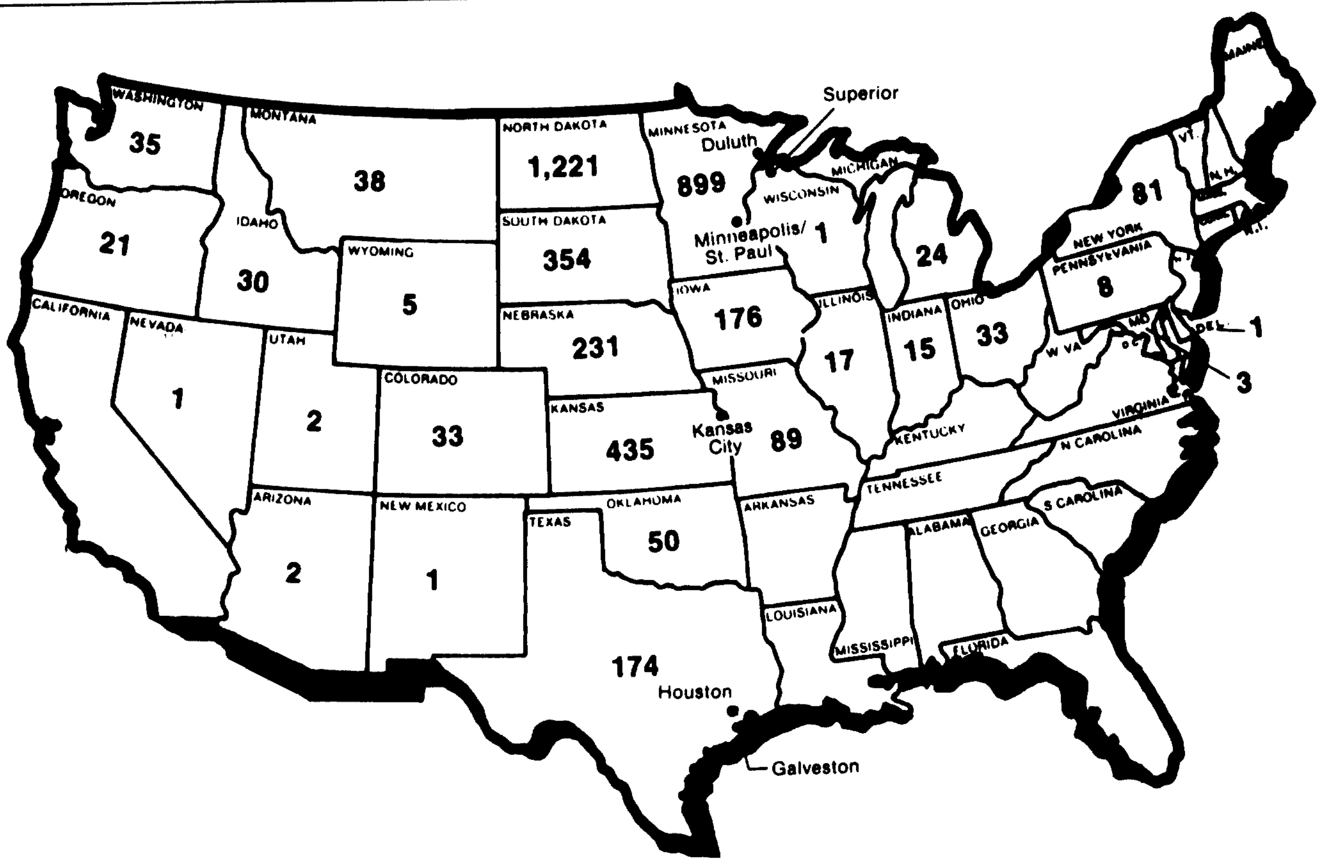
In 1985 more ASCS rail shipments originated from North Dakota than from any other state—about 1,220 shipments, or 30.7 percent of the

[3]About two thirds of the nation's wheat farms are in the Plains states from Texas to North Dakota, including Colorado and Montana; nearly 60 percent of the corn farms are in the North Central states of Iowa, Illinois, Wisconsin, Minnesota, and Indiana.

[4]Truck rates are generally competitive with rail rates for distances of about 250 to 300 miles.

total. Minnesota was second with 22.6 percent and Kansas third with 10.9 percent. However, in terms of volume, Minnesota was first with about 48.1 million bushels (22.3 percent of the total), Kansas was second with about 39.6 million bushels (18.4 percent), and North Dakota was third with almost 32 million bushels (14.8 percent). In other words, North Dakota, in general, had many, but relatively small, shipments, while Kansas had fewer, but considerably larger, shipments. Figure 1.1 shows the number of 1985 ASCS rail shipments nationwide by state of origin.

Figure 1.1: Number of ASCS Rail Shipments by State of Origin, 1985



Note: Only the 28 indicated states originated grain shipments in 1985.
Source: USDA, KCCO Loading Order Control Log.

Impact of Deregulation on Rail Transportation

The Staggers Rail Act of 1980 (Public Law 96-448), which partially deregulated the rail industry, significantly altered the way railroads and shippers do business with one another. Before the Staggers Act, government regulations strictly controlled rail rates and practices. All new rate proposals were subject to challenge by competitors, shippers, or others; defending challenged proposals could be very costly for the railroad involved. As a result, rail rates were fairly stable—rate increases and service changes occurred infrequently. When rate changes did occur, generally all railroads adjusted their rates simultaneously.

Freight rates were based almost entirely on prescribed tariffs,[5] which contain specific point-to-point rates for all possible origins and destinations in the United States as well as applicable routing provisions, rules, and regulations. Tariff rates apply equally to all shippers, government and private.

The Staggers Act substantially relieved railroads of their regulatory restrictions, leaving them largely free to compete in the transportation marketplace. The act gave railroads greater flexibility to change rates and service levels with less Interstate Commerce Commission (ICC) oversight.[6] In particular, section 208 permitted carriers to enter into contracts with shippers, making it the first time since federal railroad regulation began in 1887 that federal law explicitly permitted such contracts. Many regard this provision as the act's most significant deregulation measure because it allows railroads and shippers to privately negotiate a variety of rate and service solutions to meet their specific needs. Unless negotiated, rates remain based on prescribed tariffs.

Government agencies have the option of negotiating with railroads not only under the Staggers Act but also under section 10721 of the Interstate Commerce Act. Under section 10721 railroads have long been permitted to offer reduced rates to the government although they are not required to do so.[7] According to USDA officials, before 1980 USDA rarely attempted to negotiate for reduced rates. It believed that by doing so, it

[5] As will be discussed, railroads could offer government shippers reduced or discount rates, if they chose to do so.

[6] ICC regulates interstate surface transportation, including trains, trucks, buses, and inland waterway and coastal shipping. Legislation enacted since 1976, however, has sharply reduced ICC's role in regulating the trucking, railroad, and bus industries.

[7] Until fiscal year 1978 section 10721 was known as section 22. This section, which also allowed railroads to ship government freight at free or reduced rates, was enacted in 1887. The section was renumbered when the Interstate Commerce Act was recodified as Subtitle IV of Title 49, U.S. Code, "Transportation."

would be placing an unfair financial burden on commercial railroad traffic, which would ultimately have to make up for USDA's discounts. Along with private shippers, USDA relied on tariff rates for transporting grain.

Currently, USDA uses section 10721 of the Interstate Commerce Act to negotiate discount freight rates with railroads. According to USDA officials, USDA has never used the Staggers Act to negotiate a contract. While both section 10721 and section 208 of the Staggers Act allow for discounts from published tariff rates, two key differences exist between these provisions. First, although both require that the resulting agreements (termed "quotations" under section 10721 and "contracts" under section 208) be filed with ICC, all section 10721 quotations are available for public inspection whereas only nonconfidential summaries of individual section 208 contracts are made public—specific contract rates and provisions are strictly confidential.

Second, USDA's section 10721 quotations tend to be simple, brief documents—generally listing a new rate or providing for an extension of an existing tariff. Standard service requirements, rules, and regulations as listed in the published tariff remain in effect unless specific changes are noted. Section 208 contracts, however, are usually much longer, more complex documents that cover rates, rules, regulations, and service provisions. According to ICC, if a shipper wants something covered, it must be included in the contract. If it is not, there is no assurance it will be covered. As a result, contracts are generally more time-consuming to prepare and require more paperwork than section 10721 quotations.

The six major grain-hauling railroads that we surveyed[8] generally preferred that government agencies use section 10721 provisions because the paperwork requirements are less burdensome. As stated by one railroad official, "contracts offer no feature that cannot be incorporated into a 10721 quotation."

Objectives, Scope, and Methodology

In an October 17, 1985, letter, Representatives Berkley Bedell (Chairman, Subcommittee on Department Operations, Research, and Foreign Agriculture, House Committee on Agriculture) and Byron L. Dorgan asked us to investigate the methods CCC uses to ship government grain on railroads nationwide. Specifically, they asked us to review the

[8] Atchison, Topeka and Santa Fe; Burlington Northern; Chicago and North Western; Missouri-Kansas-Texas; Soo Line; and Union Pacific/Missouri Pacific.

extent to which CCC negotiates with railroads for reduced freight rates rather than using published tariff rates.

The requesters asked seven questions:

1. What are the government's costs of shipping grain?

2. What are the savings to be achieved by negotiating?

3. Under what circumstances does CCC negotiate?

4. Is CCC's contention that it cannot negotiate because it cannot estimate the volume of its grain shipments valid?

5. What are other possible ways CCC can obtain more competitive rates?

6. Why can private shippers meet the railroads' criteria for obtaining lower rates while CCC cannot?

7. Does CCC have full authority to negotiate or is additional legislation needed?

1. USDA Grain Shipping Costs

To determine grain shipping costs, we summarized information from KCCO freight payment activity reports for 1982-85. Information from 1982 was the earliest available. The activity reports list the number and amount of rail, truck, and barge freight bills paid each month for grain shipments.

2. Savings to Be Achieved by Negotiating

To estimate potential savings from negotiating, we obtained information on the (1) extent to which ASCS negotiated, (2) extent of negotiating done by private grain shippers and other government agencies, and (3) magnitude of savings achieved by negotiating. To develop information on the number of ASCS grain rail shipments and how many were negotiated, we used KCCO's 1985 loading order control log, a manual record containing information on each of the approximately 4,000 request-for-loading orders KCCO received in 1985. Every rail shipment is initiated by such an order. Although ASCS officials told us that using the log was the only way to develop the required information, they cautioned that the log was not a completely accurate record of the number or size of shipments. For example, a shipment originally requested to move by rail might be changed to truck or cancelled, or the amount of grain actually moved could differ from the amount in the request order. Such changes are not recorded in the log. Our sample of the log, which is discussed below, showed that about 12 percent of the original rail request orders had been cancelled, changed to truck or barge, or could not be located among the loading orders.

To establish our data base, we computerized information on each 1985 request order, including amount and type of grain, shipment origin and destination, and rail carrier. All figures in this report referring to shipment size, origin, and/or destination were derived from the data base, which we estimate to be 88 percent accurate (i.e., 88 percent of the shipments occurred as reported in the log).[9] We drew a statistically valid sample from the data base, enabling us to determine, at the 95-percent confidence level to within 3.9 to 9.6 percent of the actual value, the percentage of shipments ASCS negotiated in 1985. The sampling errors for various estimates are provided in appendix I. The determination was made by tracing the request order entries to the subsequent loading orders, which showed whether the shipments moved under negotiated section 10721 rates.

We also determined what percentage of ASCS shipments in the top 20 percent and bottom 80 percent, by volume, had been negotiated. Categorizing the shipments in this way enabled us to compare ASCS negotiating activity on its higher volume shipments with that on its lower volume shipments.

As an additional case study, we randomly selected 50 of the approximately 80 ASCS shipments in 1985 from Kansas to Houston and Galveston, Texas. Shipments from Kansas to the Gulf ports are almost entirely destined for export; are generally large volume; and, in the private sector, are typically negotiated. For these shipments, we determined both the percentage of negotiated shipments and the rail rates obtained by negotiating. We did this by tracing loading orders to freight bills. Among our reasons for selecting the Kansas-to-Gulf shipments were that (1) USDA published a report in September 1985, Impacts of Rail Deregulation on Marketing of Kansas Wheat, on private sector Kansas-to-Gulf grain shipments from October 1980 to October 1983, which provided a reliable source of comparable information, and (2) many comparable shipments occur in the private sector and ICC agreed to provide

[9]The sampling error at the 95-percent confidence level is 4.9 percent; thus, the actual percentage of shipments occurring could range from 83.6 percent to 93.3 percent with a best estimate of 88.4 percent.

us summary information on 1985 contracts covering Kansas-to-Gulf grain shipments.

To compare ASCS and private grain shipper negotiating activity, we also obtained Association of American Railroads (AAR) and USDA reports showing the percentage of private sector grain tonnage moving under negotiated rates. In addition, officials of the U.S. Department of Defense (DOD) and the Tennessee Valley Authority (TVA), two government agencies that ship sizable amounts of supplies and materials by rail, estimated their agencies' negotiating activity for our use in comparisons with ASCS' activity.

We could not determine the precise amount of savings available by negotiating. Actual discounts from tariff rates vary considerably and depend on such factors as shipment location and size; amount of competition by other railroads, truck, and barge; existing market conditions; and the individual negotiator's skill and ingenuity. In addition, specific rates for individual shipments negotiated under the Staggers Act are strictly confidential and were not available to us. To obtain an approximate range of savings,

- ICC provided us summary information on discounts on about 230 private shipper contracts initiated in 1984 and 1985 and in effect in 1985. The contracts covered grain shipments from Kansas to Houston and Galveston and from North Dakota[10] to Minneapolis/St. Paul and Duluth, Minnesota, and Superior, Wisconsin. According to ICC the contracts represented almost all contracts covering these areas for that period. To protect the confidentiality of terms and the identity of signatories, ICC did not provide specific rates; rather, it provided the amounts of refunds from applicable tariff rates. ICC also did not show whether specific discounts applied to Kansas or North Dakota shipments. Therefore, we worked with aggregated information that showed the broad range of discounts on North Dakota and Kansas contracts.
- We used USDA's September 1985 report showing average discounts from tariff rates on private sector Kansas-to-Gulf contracts for October 1980 to October 1983.
- KCCO transportation specialists computed the savings on selected negotiated ASCS Kansas-to-Gulf shipments in our 1985 sample.

[10]We obtained information on North Dakota contracts because the requesters asked that North Dakota be included in the review. ASCS officials said that they had done very little negotiating in North Dakota.

- We used weekly reports that KCCO had begun preparing in January 1986 on the number of negotiated agreements with railroads and elevators and the resulting transportation savings.

3. Circumstances Under Which CCC Negotiates

To obtain information on when negotiations occurred, we interviewed ASCS officials, including the Commodity Operations Deputy Administrator; the Director, KCCO; the Chief, KCCO Bulk Commodities Division; and the Chief, KCCO Traffic Management Division, as well as transportation specialists in that division responsible for day-to-day management of rail shipments. We also obtained these individuals' perceptions about constraints that limited ASCS' ability to negotiate. In addition, we reviewed the 103 section 10721 quotations that were in effect in 1985. These covered all of ASCS' 1985 negotiated agreements with railroads and provided information on shipment locations, provisions, and rates.

4. The Validity of CCC's Contention That It Cannot Negotiate Because It Cannot Estimate the Volume of Its Grain Shipments

To determine the validity of this contention, we sent a questionnaire to the six railroads that ship most of CCC's grain (i.e., Atchison, Topeka and Santa Fe; Burlington Northern; Chicago and North Western; Missouri-Kansas-Texas; Soo Line; and Union Pacific/Missouri Pacific). These railroads include the top four grain-hauling railroads in the country. Our questionnaire asked, among other things, whether they ever negotiated rates in circumstances where volume could not be predicted. In addition, we met with representatives from Cargill, Inc., and Bunge Corporation, two of the nation's largest grain shippers, and from Lincoln Grain, a smaller grain shipper. We discussed, among other things, whether these firms contracted with railroads in instances where volume could not be predicted. We also discussed this question with transportation officials from DOD's Military Traffic Management Command and from TVA. Our analysis of the approximately 230 contract summaries provided by ICC gave additional insight into contract requirements and the need to predict shipment volumes.

5. Other Possible Ways CCC Can Obtain More Competitive Rates

We reviewed information on key provisions in the contract summaries provided by ICC. We supplemented this information by discussing rail negotiating techniques and practices with groups representing various segments of the grain and rail industries—private grain companies; the National Grain and Feed Association; AAR; Consumers United for Rail Equity—an organization of shippers of bulk commodities, including grain and coal; and Milling and Baking News, a trade publication. In addition, we discussed this issue with officials from USDA's Office of

Transportation[11] and ICC's Office of Transportation Analysis and with academicians and transportation consultants. We discussed with DOD and TVA officials their negotiation methods as well as constraints that limited their effectiveness and how they dealt with them. We also reviewed a DOD policy study on rail deregulation and literature prepared by the Academy of Advanced Traffic, an institution providing specialized training in transportation and logistical management.

6. Why Private Shippers Are Apparently Able to Meet the Railroads' Criteria for Obtaining Lower Rates but CCC Cannot

We asked the six previously mentioned railroads whether they had any basic criteria a shipper had to meet before they would enter into a contract and, if so, what the criteria were. In addition, the information we obtained on ASCS' rail management practices assisted us in answering this question.

7. Sufficiency of CCC's Legislative Authority to Negotiate

On this matter, we reviewed section 10721 of the Interstate Commerce Act as well as section 208 of the Staggers Rail Act to assess their applicability to CCC. We also obtained and reviewed ICC's and USDA's opinions about CCC's authority.

We began our fieldwork in November 1985 and completed it in August 1986. ASCS officials provided the agency's comments on a draft of this report in November 1986. Our work was done in accordance with generally accepted government auditing standards.

[11] USDA's Office of Transportation, which is not a part of ASCS, evaluates the effect of transportation policies on agriculture and provides technical assistance to shippers.

ASCS Has Negotiated With Railroads Less Frequently Than Other Shippers Have

ASCS has not negotiated with railroads on freight rates and services as often as have private grain shippers and other government agencies. In 1985 it spent about $55.5 million on some 4,000 separate rail shipments of grain.[1] Overall, about 10 percent of these shipments (or about 21 percent of ASCS' total grain tonnage) were negotiated. Higher volume shipments were negotiated more often. For example, about 40 percent of ASCS' shipments from Kansas to Houston and Galveston were negotiated. These were generally large-volume, multiple-car shipments. In comparison, AAR reported in mid-1985 that about 57 percent of all private sector grain tonnage was moving under negotiated rates. DOD and TVA estimated that from 70 to 80 percent (DOD) and 90 percent (TVA) of their freight shipments moved under negotiated rates.

ASCS officials and transportation specialists cited seven constraints that they believed limited their ability to negotiate. These included such things as inability to predict the volume of grain movements, lack of bargaining leverage, and lack of data on rates other shippers paid. However, we found that, for the most part, these constraints have been dealt with by other shippers, and we concluded that ASCS can find ways of mitigating them. In addition, ASCS negotiations are done on an ad hoc basis—ASCS does not have any written policy, criteria, or guidelines on when its transportation specialists should negotiate or on how to determine appropriate discount rates.

Our analysis showed that some shipping costs have been decreased substantially by negotiating. A USDA study indicated that private sector wheat shipments from Kansas to Gulf ports from October 1980 to October 1983 cost an average of 17 percent less when negotiated rates were used instead of applicable tariff rates. Moreover, our review of seven representative ASCS-negotiated shipments from Kansas to Houston and Galveston in 1985 showed average savings of 29 percent over tariff rates.

[1] The number of rail shipments is based on KCCO's 1985 loading order control log, which we estimated to be about 88 percent accurate—i.e., we estimate that about 3,540 rail shipments actually occurred. We did not attempt to determine if any grain shipments originally intended for truck or barge were later changed to rail.

Relatively Few ASCS Grain Rail Shipments Have Been Negotiated

In 1985 ASCS spent about $55.5 million on about 4,000 separate rail shipments of grain. ASCS' rail costs have been increasing: in 1983 they were $11.7 million and in 1984, $18.4 million. Similarly, ASCS estimated its rail grain shipping costs between January and November 1986 to be about $64 million. (By comparison, truck and barge costs in 1985 were about $14 million and $3.3 million, respectively.)

During 1985 about 10 percent of ASCS' bulk grain shipments (or about 21 percent of its total grain tonnage) moved under negotiated rail rates or service concessions.[2] Shipments ranged from small, single-carload movements to large-volume shipments of over 200 carloads. ASCS had 103 negotiated agreements in effect in 1985 with 12 different railroads. (ASCS reported that, between January and November 1986, it had over 500 negotiated agreements.) Some agreements covered only one shipment; others covered many shipments throughout the year.

According to transportation literature, large-volume shipments are more readily negotiated than smaller ones. Basic economies in all forms of transportation occur when load size increases. Large-volume shipments allow railroads to use unit trains (generally 25 to 130 cars devoted solely to transporting a single commodity to one destination). Moving larger volumes at one time increases efficiency and results in greater ton-mile earnings. Railroads may then pass on savings to customers through reduced rates.

We sampled 210 shipments from the approximately top 20-percent-by-volume (i.e., based on shipment size) of ASCS' 1985 shipments to determine what percentage of these shipments had been negotiated. Shipments in this category ranged from about 86,000 bushels (about 27 carloads) to over 650,000 bushels (about 205 carloads), with an average of about 160,000 bushels (about 51 carloads). About 26 percent of these shipments were negotiated, compared with about 5 percent of the shipments in the bottom 80 percent.

In addition to analyzing our volume-based sample, we sampled 50 ASCS shipments from Kansas to Houston and Galveston.[3] In 1985 some 80 ASCS shipments went from Kansas and Kansas City, Missouri, to Houston

[2] As discussed in ch. 3, KCCO negotiates some agreements with grain elevators to ship CCC-owned grain under the elevators' existing contracts with carriers. KCCO does not know the elevators' contract rates; it negotiates its own rates with the elevators.

[3] Of U.S. grain ports, Houston ranked first and Galveston second in 1984 on the basis of rail carloads handled.

and Galveston; about 40 percent of these shipments were negotiated. These shipments were generally quite large, on the average around 123,600 bushels (about 39 carloads), and generally moved in multiple-car units.

Other Shippers Have Negotiated More Often Than ASCS

According to ICC, AAR, and other sources, private sector grain shippers have negotiated with railroads more often than ASCS. In addition, DOD and TVA officials estimated higher levels of negotiating activity for their agencies than we found for ASCS. In the private sector, negotiating activity has steadily increased since deregulation of the rail industry in 1980. The total number of contracts (including grain contracts) negotiated and filed with ICC increased from fewer than 1,000 in 1981, the year after passage of the Staggers Act, to over 30,000 by September 1985.

Grain Industry Shippers

The grain industry, in particular, has experienced significant increases in negotiating frequency. In its study, Railroad Freight Rates in the Five Years Since Staggers, AAR reported that, in November 1984, about 41 percent of all private sector grain tonnage was moving under contract; by mid-1985 the figure had gone up to 57 percent. In addition, contract negotiation activity was more frequent in some locations than in others. For example, according to USDA's 1985 report, Impacts of Rail Deregulation on Marketing of Kansas Wheat, shippers estimated that, from October 1980 to October 1983, over 90 percent of the private sector's grain traffic from elevators in Kansas to the Gulf ports moved under negotiated rates.

Another factor affecting contract activity is shipper size; large shippers generally negotiate contract rates more frequently than smaller ones. The Kansas Grain and Feed Dealers Association, testifying before the House Committee on Energy and Commerce during March 1986 hearings on the Staggers Act, said that a large shipper that ships from more than one location on several different railroads can effectively use competitive alternatives during its rail negotiations. In addition, according to the North Dakota Public Service Commission, many small shippers lack traffic managers and legal counsel skilled in transportation management. Such expertise makes the shipper better equipped to negotiate.

Estimates obtained from officials of Cargill, Inc., and Bunge Corporation and from officials of five major grain-hauling railroads bear out the reported high level of negotiated contract activity in the grain industry.[4] Bunge and Cargill officials estimated that 60 and 80 percent, respectively, of their total grain tonnage were negotiated and that 80 and 95 percent, respectively, of their export grain tonnage (i.e., grain destined for the ports) were shipped under negotiated rates. The railroad officials' estimates of the percentage of private grain tonnage their railroads moved under negotiated contracts ranged from 40 to 72 percent, with an average of 59 percent.

Other Government Agency Shippers

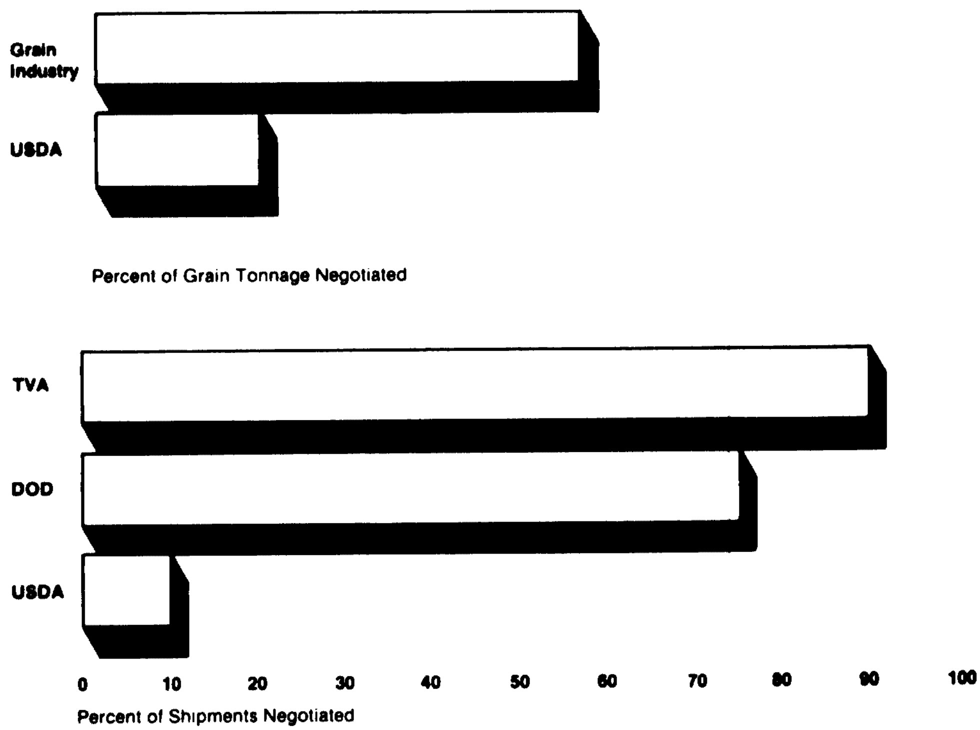
Officials at the Military Traffic Management Command, DOD's organizational unit responsible for transportation management, estimated that, in fiscal year 1985, from 70 to 80 percent of its freight shipments moved under rates negotiated under section 10721 of the Interstate Commerce Act. DOD moved about 2.2 million tons of freight in 1985 at a cost of about $115.5 million. The primary types of DOD goods moving by rail included petroleum products, vehicles and parts, ammunition and explosives, and subsistence items.

TVA ships large volumes of coal by rail—in 1985 about 9.3 million tons. TVA officials estimated that about 90 percent of TVA's coal shipments moved under negotiated rates. Unlike ASCS and DOD, TVA uses both section 208 of the Staggers Act and section 10721 of the Interstate Commerce Act in its negotiations.

Figure 2.1 summarizes the rail negotiating activity discussed in this section.

[4]We obtained estimates from Burlington Northern, Chicago and North Western, Missouri-Kansas-Texas, Soo Line, and Union Pacific/Missouri Pacific. The Atchison, Topeka and Santa Fe Railroad did not provide an estimate.

Figure 2.1: Rail Negotiating Activity: USDA, Grain Industry, DOD, TVA (1985)



ASCS Has Negotiated on an Ad Hoc Basis

ASCS does not have any written policy, criteria, or guidelines for determining (1) when negotiations should occur or (2) how much of a discount its negotiators should try to achieve. ASCS depends on its negotiators to decide whether and when to negotiate with railroads; however, it does not have criteria to judge the negotiators' effectiveness. It does not have a basis for determining how the results of its negotiations compare with those of private shippers or whether its negotiators consistently apply the same criteria as to when to negotiate or what rates to negotiate for.

Rate Negotiations

Within ASCS, responsibility for negotiating resides with six KCCO transportation specialists who arrange for all government-owned grain transportation. Three of the specialists work primarily on rail shipments and three primarily on truck and barge shipments.

Upon receiving a request for a shipment, the specialist determines how the shipment will be routed, what mode of transportation will be used, and whether to negotiate. According to ASCS transportation officials, in a deregulated environment transportation specialists should consider negotiating all shipments except those where time constraints preclude negotiations. They acknowledged, however, that the decision to negotiate is highly subjective, based on an individual transportation specialist's market knowledge, judgment, and experience.

KCCO transportation specialists said that they used the following general "rules of thumb" in determining when to negotiate.

- Existence of large-volume shipments: The specialists believed that railroads needed a sufficient incentive to negotiate (generally over 10 cars) and that incentive was lacking with low-volume shipments.
- Tariff rates perceived to be excessive: The specialists said that if they judged the tariff rate to be too high or otherwise unreasonable, they would attempt to negotiate a discount. For example, one specialist said that tariff rates from Kansas City to the Gulf were reasonable and, therefore, he was inclined to use them.
- Grain situated in a competitive location: According to the specialists, the shipment's location in relation to other railroads or trucking alternatives is an important consideration in a carrier's willingness to negotiate.
- Knowledge of the carrier's need for additional business: One specialist noted that if he knew that a carrier had a lot of empty railcars, he would negotiate with that carrier.

The transportation specialists said that they negotiate for whatever discount they think they can get at that time. One specialist said that they "play it by ear" on the basis of past experience. Another said he typically arrives at a discount by arbitrarily taking 20 percent off the best existing tariff rate.

Negotiations for Service Concessions

Negotiations have not been limited to rates but have also involved service concessions. For example, transit privileges, an important concept in grain transportation and a traditional part of the tariff rate structure in the pre-Staggers era, have been a key element in many ASCS negotiations.

Under transit privileges, shipments are eligible for reduced rates if they arrive at the transit point by rail. Typically, after harvest farmers haul their grain to the nearest local elevator. From there it is sent to inland elevators or terminals (transit points) where it can be stored, mixed, or processed before being sent to consuming areas for marketing. Rates from the transit point are normally lower on a ton-mile basis than those to the transit point. However, certain restrictions apply. For example, in general, outbound grain must be shipped by the same carrier that brought it to the transit point for the transit rate to apply. In addition, transit rates are good only for a certain period, generally 12 to 18 months, although they can be extended under certain conditions and upon payment of a charge.

Transit privileges have been particularly important for ASCS because so much government grain has been stored at intermediate points with the final destination uncertain at the time of storage. In 1985 one of the most frequently used ASCS-negotiated quotations was one in which a railroad agreed to extend the transit life (i.e., period in which transit rates can be applied) of grain originally shipped before 1984, stored anywhere along the carrier's route, and moving to the Gulf ports.

However, since the Staggers Act, the railroads have shifted to a flat rate structure designed to eliminate accessorial services, such as transit privileges, although such services can still be incorporated into contracts. Flat rates, based on point-to-point mileage, enable the railroads to offer rates more competitive with other modes of transportation. As a result, grain industry use of the transit privilege has declined. In December 1985 the Deputy Director, KCCO, announced that KCCO was reevaluating its use of transit and might not be using it as frequently in the future. Rather, he said, KCCO would move grain for the cheapest cash outlay at that point in time.

Negotiating Constraints Cited by ASCS Can Be Mitigated

Although ASCS has full authority under existing laws to negotiate freight rates and services with railroads, ASCS management officials and transportation specialists said they are faced with certain obstacles that limit their ability to negotiate. The constraints cited were (1) inability to predict volume, (2) lack of personnel, (3) lack of bargaining leverage, (4) lack of adequate notice as to when grain was to be shipped, (5) lack of data on contract rates other shippers had paid, (6) limited ability to control movements, and (7) restrictions created by certain transit provisions. However, we found that except for ASCS' limited ability to control grain movements and, to some degree, a lack of personnel, these constraints are not unique to ASCS and other shippers have found ways to deal with them.

1. Inability to Predict Volume

This was the constraint most frequently cited by transportation specialists, managers, and the Director, KCCO. The contention is that ASCS cannot predict the volume of its grain movements over time as precisely as private shippers can. ASCS officials told us that they do not know how much grain will come into the government's inventory from price-support loan forfeitures,[5] making it difficult to predict the frequency and location of grain reconcentrations (movements from one grain elevator to another). One KCCO transportation specialist said that historical data are not reliable predictors of volume since traffic patterns can vary each year. For example, an area with many shipments one year may have fewer the next because of drought. In this situation, ASCS would have fewer reconcentrations because local elevators would have enough space for the smaller harvest.

The ASCS officials said that because they cannot accurately predict volumes, they cannot make volume commitments to railroads, which are, therefore, reluctant to negotiate.

Our Analysis

On the basis of the contract information ICC provided to us, discussions with private sector grain shippers, and information obtained from railroad officials, we concluded that ASCS' inability to predict volumes need not be an obstacle to more frequent negotiations.

ICC provided summary information on relevant provisions from about 230 private grain shipping contracts in effect in 1985. The contracts covered grain shipments from Kansas to Houston and Galveston and from North Dakota to Minneapolis/St. Paul, Duluth, and Superior. According to ICC, the contracts were representative of those filed during 1985 for those areas.

The most evident characteristic of these shipping contracts is the wide variety of terms—particularly those concerning volume and contract duration. For example, about two thirds had volume requirements ranging from a single car (29 contracts) to over 2,000 cars (2 contracts), with many variations in between. (There is little need to predict volumes in contracts with single-car requirements since all that is needed to receive a discount rate is that one carload of grain be shipped.) Some of these contracts required that shipments move in 15-car units, others required 50-car units, and others had no minimum unit requirements. In addition, about one third of the contracts had a percentage-of-business

[5] Loan forfeitures are the major source of the government's grain inventories.

provision rather than a specific volume requirement. Under this provision, a shipper agrees to give the carrier a certain percentage of business (typically 90 to 95 percent) from a particular location(s) for the contract's duration. Such an agreement obviates the need to accurately predict volumes since the carrier has agreed to provide a discount on the basis of a percentage of business, whatever the total amount of that business may be. Thus, for about a third of the contracts, there was little, if any, need to accurately predict specific volumes.

The contracts' durations also varied, with many involving relatively short-term commitments of 3 months or less. A short-term contract lessens the need to make long-range volume predictions. Of the North Dakota contracts, about 57 percent were for 3 months or less. The Kansas contracts generally had longer durations—about half were for 9 months to 1 year—but even here, many (24 percent) were for 3 months or less.

Officials of three grain shipping companies—Cargill, Bunge, and Lincoln Grain—said that successful negotiations do not depend on the ability to make volume commitments. They said in the grain industry it was often difficult to accurately predict volumes over an extended period. One shipper official noted that the dominant market changes frequently. For example, corn might need to be shipped to the West Coast for export to the Far East one week and to southeastern poultry farmers the next week. He pointed out that shippers had to be very sensitive to "windows of opportunity" and needed the flexibility to move grain to the best markets on short notice. This, he said, makes it difficult for them to be locked into long-term volume commitment contracts. According to this official, declines in private sector grain shipments and in rail revenues have made it a buyer's market for shippers; railroads are anxious for new business and are willing to negotiate under a variety of conditions.

All six of the railroad officials who answered our questionnaire said that they had negotiated with shippers in situations where grain volumes could not be predicted. Five of these officials said that advance knowledge of grain volumes was moderately important to their willingness to negotiate.[6] They acknowledged that the grain business was dynamic and often unpredictable. One railroad official stated ". . . the grain business generally gets busy during harvest and the rest of the year is as unpredictable as the weather . . . we have adapted our operation to allow for sudden changes in the market. When analyzing the

[6]The sixth said that advance knowledge of grain volumes was minimally or not at all important.

need for a contract, volume is just one of the criteria that is taken into account."

2. Lack of Personnel

The Chief of KCCO's Traffic Management Division cited lack of personnel as the major constraint to increased negotiations. According to the chief, the division did not have enough transportation specialists to devote sufficient time to negotiating rates, and budgetary constraints prevented KCCO from hiring additional transportation specialists. Another ASCS official said that more transportation specialists were needed; however, since getting additional specialists was unlikely, KCCO was searching for ways to use its current staff more effectively.

Our Analysis

ASCS records showed that the Traffic Management Division's workload has increased in recent years along with grain inventories. However, the number of its transportation specialists has remained about the same. Thus, the lack of personnel as a constraining factor to increased negotiations may have some merit. Nevertheless, as discussed in greater length in chapter 3, staff numbers are only one element in staff management. Also important are staff skills (i.e., whether they are adequate for current job requirements) and management information systems, which can enhance staff effectiveness and reduce time spent negotiating.

For example, private grain shippers, as well as DOD and TVA transportation officials, stressed the need for new skills and knowledge, such as negotiating skills and business expertise, which were not required before rail deregulation in 1980. Other shippers we talked with had given their transportation specialists training on how to negotiate with railroads and/or brought on additional staff and consultants with business backgrounds. According to KCCO officials, ASCS had done neither.

In addition, ASCS does not have management information systems to provide data on previous grain shipments (e.g., size, origins, destinations, and rates). According to transportation literature we reviewed, such information enables a shipper to develop a negotiation strategy—to prioritize negotiation efforts and improve its negotiating position.

3. Lack of Bargaining Leverage

KCCO transportation specialists and officials said that a major constraint is lack of leverage in areas served by only one railroad. Leverage involves the ability to award traffic to a carrier in exchange for rate and/or service concessions. The specialists and officials noted that many

ASCS shipments originate from areas served by one railroad; thus, ASCS' bargaining leverage is limited. According to a KCCO transportation specialist, the only leverage in such areas is the alternative of using trucks. As discussed earlier, trucking is an economically feasible alternative to rail only for distances of about 300 miles or less.

Our Analysis

Our discussions with officials of private sector grain shippers, DOD, TVA, and Consumers United for Rail Equity and with transportation consultants confirmed that shippers served by only one railroad face constraints in negotiating with railroads. However, the severity of this constraint depends on the size of the shipper's operations (i.e., whether shipments are made from more than one location) and on the shipper's negotiating abilities. For example, a shipper with multiple locations, some of which are served by several railroads, can use its business in competitive areas as leverage in areas where competition is scarce. When effectively used, leverage enables a shipper to award traffic to or take traffic from carriers to ensure reasonable rates and adequate service for all the shipper's traffic.

Many ASCS rail shipments originate from locations with little competition. For example, the largest percentage of ASCS' 1985 grain rail shipments (about 31 percent, or about 1,220 shipments) originated from North Dakota, a state served primarily by one railroad, the Burlington Northern. According to the North Dakota Public Service Commission, North Dakota's closest major grain market is over 200 miles from the nearest North Dakota point, and there are no navigable waterways within 200 miles of its borders. Thus, according to the Commission, both truck and barge have a difficult time competing for North Dakota grain movements. Further, ASCS' 1985 grain rail shipments from North Dakota were relatively low in volume—the average 1985 shipment was about 8 carloads compared with 17 carloads in Minnesota, 29 carloads in Kansas, and over 33 carloads in Texas.

Because of the lack of competition in North Dakota, the relatively small size of ASCS shipments there, and ASCS' belief that it lacks bargaining leverage in such cases, ASCS had negotiated few shipments from North Dakota. None of the 53 North Dakota shipments in our sample of 1985 ASCS shipments had been negotiated. (However, it is statistically possible that between 0 and 6.4 percent of all North Dakota shipments—or between 0 and 77 shipments—could have been negotiated.[7])

[7]These limits were calculated at the 95-percent confidence level.

According to ICC information, private grain shippers had at least 155 negotiated shipping contracts in effect in 1985 with North Dakota origins. Shipper officials and transportation consultants we interviewed said that they believed that shippers were able to obtain discount rates in areas such as North Dakota by effective use of leverage. They suggested that one way shippers had done this was by using business in competitive areas to increase the carrier's willingness to negotiate in noncompetitive areas. For example, although the Burlington Northern has little competition in most of North Dakota, further south in major transit points such as Kansas City and Atchison, Kansas, and Fort Worth, Texas, the Burlington Northern competes with at least three carriers.

A KCCO official acknowledged that ASCS needed to improve its negotiating performance in North Dakota and that it did not use its bargaining leverage to full advantage.

4. Lack of Adequate Notice

ASCS reconcentrates grain from one elevator to another upon an elevator operator's request. Although it is not obliged to move the grain, ASCS does so to accommodate the needs of farmers requiring storage in local elevators after harvest. According to ASCS officials, operators often wait until the last minute to request transfer of government-owned grain to avoid empty storage space. As a result, ASCS has little lead time to negotiate such transfers. ASCS transportation officials contended that the shorter the time period from notification to shipment, the less leverage for negotiating. In our opinion, lack of adequate notice is not such a problem for export shipments (which made up about 30 percent of ASCS' 1985 grain rail shipments) because, according to an official in KCCO's Bulk Grain Inventory Branch, such shipments generally require 60 days' prior notice.

Our Analysis

We believe that lack of notice need not be an obstacle to negotiations. Because reconcentrating grain is not an ASCS obligation (i.e., it provides this service to accommodate the needs of local farmers), ASCS is in a position to establish the notification requirements it determines are necessary to facilitate negotiations with railroads. In addition, short lead times apparently need not preclude negotiations. Two railroad officials we surveyed indicated that they were aware of the grain market's unpredictability and the need for shippers to respond to changing market conditions. As a result, they had adapted their operations to provide shippers the flexibility to negotiate rates under these circumstances. A third said that his company was willing to negotiate for any grain traffic that would increase market share.

5. Lack of Data on Negotiated Rates Paid by Other Shippers

The Chief of KCCO's Traffic Management Division said that next to lack of personnel, this was the most serious constraint to negotiating effectiveness. He said that KCCO transportation specialists did not have any way to judge the adequacy of their negotiated rates because they did not know what rates other shippers were obtaining. Similarly, ASCS did not have a benchmark to use in evaluating its specialists' negotiating effectiveness. ASCS did not have information on other shippers' rates because, under the provisions of the Staggers Act, specific contract rates and terms are proprietary information. The chief said that knowing private shippers' contract rates would give ASCS a basis for determining appropriate discounts.

Our Analysis

Although specific contract rates are proprietary and are unavailable to all shippers, government and private, information useful in establishing "best rates" is available from other sources. For example, shipper officials and consultants told us that the grain market is a good source of information on rail rates. Thus, according to a Bunge official, if a shipper's bid for farmers' wheat is 5 cents a bushel higher than that of other shippers in the area, the competitors have a good idea that the shipper may be paying proportionally that much less for shipping the wheat. In addition, as discussed in chapter 3, software is available that enables shippers to transform data from carriers' annual regulatory reports into movement-specific costs. According to Bunge and Cargill officials, such software can be a useful tool in helping to determine appropriate rates to negotiate for.

6. Limited Ability to Control Movements

The Chief of KCCO's Traffic Management Division noted that important differences existed between ASCS and private sector grain movements. ASCS is primarily involved in grain inventory management, whereas private shippers are grain merchandisers. Thus, according to the chief, private shippers have greater flexibility in selecting market areas and in making moves that maximize transportation economies. ASCS, on the other hand, cannot always move grain to areas conducive to economical transportation. ASCS shipments often involve grain reconcentrations from areas of little competition, such as North Dakota. When storage space is scarce, as it has been in recent years, ASCS grain movements may be based on storage considerations rather than on traditional market considerations. In such instances, grain may be moved to locations that make little sense from a transportation point of view.

Our Analysis

ASCS' role as an inventory manager does limit its ability to make optimal use of transportation economies. However, the effects of this constraint may be diminished through improved planning and negotiating strategies. For example, the fact that ASCS stores grain in many widely dispersed facilities may be used to its advantage. Because it ships from so many locations, ASCS is in a good position to use leverage with railroads. In this regard, it could provide business to a railroad in a competitive area, such as Kansas City, in exchange for rate concessions from the railroad in areas of little competition and lower volume shipments, such as North Dakota. We believe that effective use of leverage would allow ASCS to overcome some of the limitations inherent in its role as inventory manager (e.g., having to, at times, ship from less competitive locations, move some small shipments, and make movements on the basis of storage—rather than transportation—considerations). As discussed in chapter 3, effective use of leverage requires a transportation planning process, which enables shipments to be managed systematically, rather than in an ad hoc fashion.

In addition, other methods may exist that would enable ASCS to make better use of transportation economies. For example, an official of Lincoln Grain, which leases storage space to ASCS, suggested that ASCS work more closely with ASCS county offices in planning the initial movement of grain from the farmer to the grain elevator. The ASCS county office historically has been responsible for arranging the movement of farm-stored grain forfeited under the government's loan program. According to the Lincoln Grain official, ASCS should consider directing that farm-stored grain be moved to larger, more efficient elevators initially even if they are farther from the farmer than smaller, local elevators. The official contended that it would make economic sense for ASCS to reimburse the farmer for hauling the grain to larger elevators that are better equipped to handle and transport grain efficiently and economically.

7. Restrictions Created by Transit Provisions

When government grain has transit privileges (i.e., provision for intermediate stops) resulting from an earlier shipment, ASCS has generally used the railroad that made the original shipment to move the grain to its final destination. As discussed previously, under transit provisions, the rate for moving grain from the originating elevator to the intermediate elevator is normally higher per ton mile than the rate from the intermediate elevator to the ultimate destination. Generally, a shipper must use the railroad that made the original move in order to take advantage of the lower rate on the second movement. Thus, on grain with transit privileges where ASCS has already paid the higher rate for moving the grain to an intermediate elevator, ASCS has generally used the originating railroad rather than negotiating another rate.

Our Analysis

If ASCS determines that use of transit privileges already in its possession would result in rates less than what it could negotiate for, then we agree that those transit privileges should be used in lieu of negotiating. However, we believe that to fully assess the impact of transit privileges on transportation costs, the entire transit process needs to be considered. In particular, as discussed earlier, rates on initial movements are generally higher on a ton-mile basis than those on subsequent movements. Thus unless the second movement occurs before the transit privilege expires (generally 12 to 18 months), any cost benefits of acquiring transit privileges will not be realized.

In fact, ASCS policy on transit privileges has changed, making this constraint less of an issue for the future. KCCO's deputy director discussed the departure from past policy at a December 1985 seminar for transportation executives. He stated that, in the interest of cost savings, the ASCS negotiation philosophy was now that it would not normally pay additional monies to accrue benefits, such as transit privileges, that it may not use in the future.

In addition, according to USDA, private shippers, and KCCO transportation officials, transit privileges have become increasingly less common since the Staggers Act. Except for Kansas, and to some extent Texas and Oklahoma, the transit privilege is rarely incorporated in the tariff. Thus, transit privileges are not a significant factor for ASCS shipments originating in states other than those three. Further, as discussed earlier, railroads are now making greater use of flat rates and eliminating accessorial services, such as transit arrangements. If a shipper wishes to have transit privileges, they can be incorporated into a contract. However, according to a Bunge official, this is rarely done. He said that most contract rates involve flat rates from one point to another.

Substantial Savings Have Been Achieved on Negotiated Shipments

The information both on average discounts received by Kansas grain shippers and on savings resulting from previous ASCS-negotiated shipments and summary information on private shipper discounts indicate that ASCS could achieve considerable savings by negotiating more often. However, the precise amount of savings available to ASCS could not be determined. The specific amount of discount on each shipment depends on many factors, such as the shipment's size and location, the negotiator's skill and ingenuity, the carrier's current economic condition, and the supply and demand for rail services at that location. In addition, specific contract rates of private shippers are confidential and were not available to us for estimating more specific savings amounts.

Negotiated Discounts on Kansas Grain Shipments Averaged 17 Percent

USDA's September 1985 report, Impacts of Rail Deregulation on Marketing of Kansas Wheat, found that private-sector-contracted rates for shipping wheat from Kansas to Gulf port destinations averaged 17 percent less than tariff rates at the effective dates of the contracts.[8] The period covered in the study was October 1980 to October 1983. Although the study focused on Kansas shipping contracts for wheat, it also noted that the contracts were reflective of all private grain marketing in the Central Great Plains.

When It Has Negotiated, ASCS Has Achieved Substantial Savings

For an indication of savings ASCS achieved on those shipments it had negotiated, we reviewed ASCS' 1985 shipments from Kansas to Houston and Galveston.[9] Our sample of 50 shipments contained 18 shipments that had been negotiated with the Atchison, Topeka and Santa Fe Railroad and 1 with the Missouri-Kansas-Texas Railroad.

To identify savings resulting from those negotiations, we selected 7 of the 19 shipments to compare actual shipment costs as a result of negotiations with what shipping costs would have been had tariff rates been used. Although not randomly selected, the seven shipments were those that we considered to be representative of all shipments from Kansas terminal storage facilities to Gulf ports. A KCCO transportation auditor confirmed that the shipments were representative.

[8] For this study, ICC provided USDA with limited access to information on rail contracts for the purpose of studying the economic relationship between rail contracts and prices paid to farmers. All collection and compilation of raw data from rail contracts was done solely by ICC personnel.

[9] About 40 percent of ASCS' 80 1985 shipments from Kansas to Houston and Galveston were negotiated.

Because of the complex, technical nature of transit rate calculations, KCCO's traffic management staff computed the savings for us. Their calculations indicate that costs for the seven shipments averaged 29 percent less than the published tariff rates. Substantial differences existed in the percentage of savings among shipments—ranging from about 6 percent on a 76-carload shipment to about 63 percent on a 10-carload shipment. According to the KCCO transportation auditor, the disparities were due primarily to differences in the application of the transit privilege. In general, the greater the distance in the initial move to the transit point, the greater the rate discount from the transit point to the Gulf ports. In addition, the amount of discount varied depending on the date the original shipments were made.

To obtain information on savings resulting from its negotiations, in January 1986 KCCO instituted a manually prepared weekly report on the number of negotiated agreements with railroads and elevators and the resultant savings. According to the reports, between January and mid-November 1986, shipments moving under negotiated agreements resulted in savings of about $21 million. Although we could not verify the accuracy of the cost savings cited by KCCO because the information on which they were based was not recorded, the cited savings further demonstrate the magnitude of savings available through negotiations.

Negotiated Savings Achieved by Private Shippers Varied Widely

The dynamic nature of contract negotiations—a reflection of competitive forces, economics, and individual negotiating skills—was illustrated in the wide variety of negotiated discounts achieved by private shippers.

To enable us to determine the range of discounts negotiated by private shippers, ICC provided us summary information on 1985 grain shipping contracts from Kansas to Houston and Galveston and from North Dakota to Minneapolis/St. Paul, Duluth, and Superior. Because rates and provisions in specific contracts are proprietary information, ICC aggregated the information so that specific origins, destinations, and railroads could not be identified. Information was provided on 118 allowance/refund contracts in effect in 1985 (discount is expressed as the dollar amount refunded per carload or hundredweight of grain shipped).[10]

[10]ICC also provided summary information on 114 rate contracts from those origins. However, since the information on these contracts covered only volume requirements and not specific rates, we could not use them in determining the range of discounts.

According to ICC, these contracts were representative of grain contracts originating in Kansas and North Dakota and filed during this period.

The refund amounts on these contracts varied greatly. For example, on 22 contracts with single-car volume requirements (refunds provided on shipments of 1 carload and over), refunds ranged from $75 to $608 per car. In three percentage-of-business contracts (refund provided if shipper gives railroad a certain percentage of business from that location), one contract, requiring 80 percent of the shipper's business, provided a refund of $209 to $247 per carload of grain shipped; a second, requiring 90 percent of business, provided a $190 per carload discount; and the third, requiring 95 percent of business, provided a $722 to $836 per carload discount.

ASCS Can Take Steps to Negotiate More Frequently and Effectively

By deregulating the rail industry, the Staggers Act significantly changed the way shippers and carriers do business. Private and major government shippers, including ASCS, generally agree that deregulation has required new approaches to transportation management. Shippers other than ASCS have taken actions in several areas to maximize benefits available by negotiating with railroads, including increased emphasis on transportation planning, use of automation to provide information essential to negotiations, and development of staff skills and expertise needed for operating in a deregulated environment.

ASCS has done little in any of these areas. First, its transportation planning process is minimal: ASCS negotiations have been done on an ad hoc basis. ASCS does not have an automated data base to provide basic information, such as shipment origins and destinations, shipment sizes, and number of negotiated versus nonnegotiated shipments. ASCS needs such information to develop a negotiating strategy that would enable it to maximize savings. Second, ASCS' bulk grain transportation function is not automated: KCCO's Traffic Management Division operates under a 1955 manual system. Extracting information on past shipments and rates, for use in planning and negotiating, can be time-consuming and labor-intensive. Third, ASCS has not provided training to its transportation management specialists on negotiating or on other business-related skills. Neither has it acquired additional expertise in such areas as transportation costing, marketing, or economics. According to private sector and other government shippers, such expertise is necessary to optimize negotiating leverage.

Strengthened Planning Process Needed to Facilitate Negotiations

The Academy of Advanced Traffic,[1] in a 1986 seminar on transportation rate negotiations, stressed the importance of planning in successful negotiations. According to the Academy, successful negotiations require that a shipper (1) know what it hopes to achieve and (2) have the appropriate information at hand to best achieve it.

A DOD Military Traffic Management Command policy study on rail deregulation also emphasized the need for planning. According to the study, a principal response of private sector shippers to deregulation has been an increased emphasis on strategic planning. The study further

[1] The Academy of Advanced Traffic provides specialized training in transportation and logistical management. It is a wholly owned subsidiary of the Traffic Service Corporation, a leading publisher of traffic and transportation textbooks and business magazines.

noted that an important aspect of the planning process is a comprehensive knowledge of the traffic base. For example, although specific movements may vary from year to year, repetitive patterns (e.g., the movement of export grain to the Gulf ports) often appear. In our opinion, analysis of historical traffic patterns can assist in planning an overall negotiating strategy. For example, it can enable the transportation manager to assess the feasibility of volume commitments for certain movements or the need to negotiate for special equipment or services.

According to the DOD policy study, a planning process must also address a shipper's long- and short-term transportation needs; carrier marketing strategies, financial conditions, and operating and economic structures; and general economic conditions. The study states that planning facilitates use of the negotiator's principal strength—traffic leverage (i.e., ability to award traffic to or take away traffic from carriers to ensure reasonable rates and adequate service). Use of leverage may enable a shipper to achieve rate concessions in areas of little competition and low volume in exchange for giving the carrier business in more competitive areas.

ASCS Transportation Planning Process Is Minimal

KCCO Traffic Management Division officials acknowledged that KCCO's transportation planning process was minimal. According to one KCCO transportation official, once a shipment occurs, it is forgotten. Historical data are not used for planning or for developing an overall negotiating strategy. Another KCCO official noted that the transportation specialists had little time for long-range planning; they were too busy arranging grain movements.

ASCS does not have a strategic plan for negotiating with railroads; negotiations occur on an ad hoc basis. In our opinion, a strategic plan would enable ASCS to maximize savings by (1) more effectively using traffic leverage to gain rate concessions from carriers for its less competitive shipments, (2) determining the railroads that provide the greatest savings and, when possible, concentrating its business accordingly, (3) where possible, timing its grain reconcentrations among warehouses to take better advantage of carriers' off-peak periods when the carriers might be more willing to provide rate concessions, and (4) enabling it to better predict future shipment origins and destinations.

According to the Academy of Advanced Traffic, a key element in the planning process is to define the characteristics of the traffic itself.

However, ASCS does not maintain an automated traffic data base providing information on shipments, such as the amount of grain it ships by rail each year or the shipments' origins and destinations. The only means of extracting such information is manually from various source documents. In addition, ASCS has not compiled information on the percentage of shipments that were negotiated overall or during any particular period. It can provide only "best guesses." Thus, ASCS does not have a way of comparing its negotiating frequency with that of private shippers. Consequently, it is difficult to measure past performance and, in turn, set goals for future performance.

Furthermore, according to the Chief of KCCO's Traffic Management Division, his unit lacks information on where warehouse-stored grain stocks are located—in particular, grain under a price-support loan that might be forfeited after the loan matures. The chief added that without such information, the transportation specialists cannot predict where shipments will be originating.

The chief said that more and better information was needed to effectively manage transportation operations. He noted that in January 1986 KCCO had begun to track cost savings resulting from negotiations and that this information was included in KCCO's weekly activity report to the ASCS deputy administrator. The information on which the reported savings are based is supplied verbally or in notes from the transportation specialists. However, records are not maintained to document and preserve the computations for future use and planning.

Automation Can Facilitate Planning and Negotiations

Automation, in the form of both software packages and microcomputers, is increasingly used by private shippers and government agencies to fine-tune strategic transportation planning processes before negotiations. One area where computer-assisted procedures are available is traffic-lane analysis, which provides information on traffic patterns. By knowing when and where its traffic is moving and in what volumes, a shipper can develop the leverage necessary to effectively negotiate. In our opinion, a shipper would be in a better position to negotiate optimal rate discounts at high-volume locations if it could tell the carrier how much grain had been shipped from those locations over various time periods.

The computer can also be used to translate raw data, such as traffic-lane information, into graphic depictions. For example, a computer program with map graphics, developed at the University of Nebraska-Lincoln, enables the user to enter various cost factors and display on the screen how grain should economically flow in the important first move from the producer to the market or storage elevator.

Computers can also assist in comparative rate research. According to the Academy of Advanced Traffic, a number of commercial services maintain data bases on rate information for all modes of transportation. (This does not include rail contract rates which, as discussed earlier, are proprietary.) Computers can also aid in a variety of rate comparisons involving detailed calculations, such as comparisons of rates over multiple routes and comparisons of total charges where various accessorial services (such as transit) are involved.

Another important use of computers in transportation is in cost-finding. For shippers, software exists that can transform data from carriers' annual regulatory reports into movement-specific costs. For example, ICC developed a method for determining rail costs called the Uniform Rail Costing System. This system, which enables shippers to develop estimates of movement costs, is available commercially at a minimal cost. Cargill and Bunge officials said that their companies subscribe to the Uniform Rail Costing System and that they thought it was a useful tool. However, they added that carriers' financial conditions are dynamic and that it was difficult for a software package to provide timely cost information. They believed that by keeping attuned to the transportation marketplace, a shipper could gauge, fairly accurately, the "going rates" for rail movements.

ASCS Lacks an Automated Transportation Management System

ASCS operates its bulk grain transportation functions under a manual system developed in 1955, whose only means of extracting information is from a variety of source documents—a time-consuming, labor-intensive process. ASCS does not have a computerized system to capture data on bulk grain rail movements: origins and destinations, number and sizes of shipments, number of negotiated versus nonnegotiated shipments, rates achieved, and reasons shipments were not negotiated. Given the limited size of KCCO's transportation staff, in our opinion, ASCS cannot possibly accumulate the needed data manually. Consequently, it does not have any management reports that could assist in the negotiation process. In addition, KCCO has not used rail-costing software packages to help determine carrier costs.

The Chief of KCCO's Traffic Management Division said the lack of an automated system limited KCCO's ability to negotiate successfully. He said that computerized data on prior grain shipments—such as the number and volume of shipments, the amount of business ASCS gives carriers in various sections of the country, and rail rates—would help the specialists to better negotiate with railroads.

According to the chief, ASCS has a contract with Arthur Andersen & Company to automate portions of KCCO's bulk grain management system. Plans call for the system to generate information on such items as the amount of grain inventories and payments to vendors as well as limited information on transportation. The information on transportation will include data on truck contracts and existing transit privileges. However, as currently planned, the system is not intended to generate information on rail movements or rates—information that, according to the chief, would enhance KCCO's ability to successfully negotiate.

Development of New Skills Needed for a Deregulated Environment

Effective management ultimately depends on effective managers. Planning and management information systems provide analytical tools and a framework for making decisions. However, the way those tools are used and the adequacy of the decisions depend on a manager's skill and judgment. The shipper and transportation officials we interviewed, as well as the transportation literature we reviewed, frequently mentioned the need for new skills appropriate to a deregulated environment, particularly skills with a business and communications orientation.

According to a Cargill transportation executive, before deregulation, if transportation managers needed to move goods from point X to point Z, they looked up the tariff rate. Today, they are no longer bound by that straitjacket. Instead, they are largely free to use all their creativity in crafting transportation into larger, corporate objectives. However, he added that for those rooted in an age of regulation, adjustment has been difficult. Since deregulation, transportation management has become complex, dynamic, and full of uncertainty. These changes, he concluded, have generated feelings of anxiety among transportation managers.

The Military Traffic Management Command's study on deregulation describes the situation more pragmatically. It concludes that DOD must change its mind-set, policies, and skills to enable it to compete effectively with private sector shippers and bargain with carriers. Specifically, the study notes that DOD traffic personnel have generally been trained in transportation operations and the traffic/regulatory aspects of transportation. This has resulted in expertise in such areas as equipment utilization, hazardous material transportation, billing, tariffs, and routings. The study concludes that while these operational skills are still necessary, deregulation's emphasis on planning and negotiations has created the need for other skills. Among them are marketing, economics, finance, communications, and cost accounting.

Bunge and Cargill officials also stressed the importance of enhancing transportation management expertise. These officials told us that their companies had added staff with merchandising backgrounds to their traffic divisions and had retrained existing traffic staff. They added that since the Staggers Act, communications between grain merchandisers and traffic managers had increased.

Similarly, private grain shippers enhance their negotiating effectiveness by paying close attention to their competitors' activities. A Bunge official told us that in competitive areas he generally knew what rail rates his competitors were receiving through his day-to-day involvement in grain marketing. For example, if one shipper puts in a higher bid for local wheat, other shippers can conclude that it is paying proportionally less to transport that wheat. This helps shippers to determine "best rates" during their own rate negotiations.

Shippers have also used training to augment existing skills. Cargill and Bunge officials said their companies had used cross-training involving an exchange of expertise between grain merchandisers (with business expertise) and transportation managers (with operational expertise). In addition, numerous seminars and workshops are available on such topics as negotiating rates with railroads, understanding transportation contracts and carrier liability, and marketing and pricing transportation rates and services.

The transportation staffs of DOD and TVA have taken advantage of available training, according to the DOD and TVA officials we interviewed. DOD has offered an in-house seminar, conducted by university staff, on how to negotiate. Several of its transportation analysts have also attended external traffic management courses. TVA has also provided some in-house training and encourages its traffic specialists to obtain external training. In recent years, they have attended seminars in transportation pricing, contract negotiations, and processing loss and damage claims.

An additional way of supplementing skills is through consultants. Rail transportation consultants are available to assist in various aspects of transportation management, including cost and system analyses, rate and route evaluations, and the legal aspects of negotiations.

According to TVA officials, TVA uses consultants on an as-needed basis to analyze and interpret railroad and ICC accounting and costing practices, conduct cost studies of coal movements, assist in negotiations of rail rates, and provide expert cost testimony in regulatory proceedings.

ASCS Needs to Enhance Transportation Staff Skills

KCCO officials acknowledged the need for additional business-related expertise in KCCO's transportation management operations. However, ASCS had done little to upgrade staff skills nor had it used consultants to augment existing negotiating expertise. Of the three KCCO transportation specialists who spend most of their time processing bulk grain movements by rail, two have worked for KCCO for over 23 years and the third for over 5 years. Whatever expertise they have gained has been primarily on the job. According to the specialists, while at KCCO they have not received any training on how to negotiate or in other business-related skills. One KCCO transportation official said that KCCO has lacked funding for formal training in areas that would enhance the negotiators' effectiveness; another said that the Traffic Management Division was too busy to provide training for its transportation specialists.

The Chief of the Traffic Management Division, who began working at KCCO in June 1985, had previously worked for Cargill, Inc. One KCCO management official said he hoped the chief would be instrumental in improving negotiating effectiveness. The chief said that changes since deregulation necessitated that transportation specialists acquire business-related skills to enhance negotiating skills. He said that formal training would be particularly useful in the following areas.

- <u>Marketing</u>: According to the chief, transportation specialists must have knowledge of grain marketing and be able to apply this knowledge when deciding how and where to move grain. They need to learn where the grain markets are and be aware of the flow of grain to these markets. Railroads use their grain pricing and marketing staff as rate negotiators—a good indication that marketing is a major factor in rate negotiations.
- <u>Economics</u>: The chief said that transportation specialists need to learn the basic concepts of economics (supply and demand) and how to apply them. Such knowledge will alert them to economic conditions that are favorable in obtaining discounts.

- Communications: According to the chief, oral communication skills are necessary because most ASCS negotiations are conducted over the telephone. He noted that skills in written communication are not as important because transportation specialists do not have the time to write proposals and wait for answers.

The chief added that although training in the above skills was necessary, KCCO lacked the funding to provide it.

Officials from Bunge and Lincoln Grain suggested that ASCS work with them and use their negotiating expertise. They maintained that operators of large grain elevators have daily involvement in rate negotiations and grain marketing and could be used to augment ASCS expertise. The Bunge official suggested that ASCS work with elevator operators to develop joint contracts in which both would share the benefits. The Lincoln Grain official suggested that ASCS advise the elevator operator of intended movements and have the operator work out the details. ASCS would have rate price approval. This would give ASCS use of an experienced negotiator without the need for additional staff. According to this official, price approval review is an old concept. He said the grain industry and ASCS have used it for years in the pricing of Public Law 480 grain shipments.

KCCO officials told us that they had occasionally moved grain under contracts previously negotiated by elevator operators. They said that the elevator operators do not tell KCCO what rates they are paying and that KCCO negotiates separate rates with the elevators for amounts less than the published tariff rates. A KCCO transportation specialist told us that the elevator operator benefits from this arrangement since ASCS' grain shipments help fulfill any volume commitments the elevator may have made.

Conclusions, Recommendations, and Agency Comments

Conclusions

While private sector grain shippers and other government agencies have been increasingly active in negotiating discount rates with railroads, ASCS has lagged behind. According to ASCS transportation officials, a number of constraints have hindered ASCS' ability to negotiate. We agree that one constraint—limited ability to control the origins and destinations of ASCS grain shipments—is a limiting factor. As a grain inventory manager, rather than a grain merchandiser, ASCS cannot take full advantage of transportation economies. For example, it cannot always move its grain to the most economically advantageous locations. In addition, ASCS' contention that it lacks sufficient staff to effectively negotiate may also have merit.

However, other obstacles cited by ASCS officials—inability to predict shipment volumes, lack of bargaining leverage, lack of adequate notice as to when grain was to be shipped, lack of data on contract rates other shippers paid, and restrictions created by transit provisions—could be mitigated by management actions to improve ASCS' ability to negotiate. As one of the nation's largest grain shippers, ASCS ships grain from many locations nationwide. This puts it in a position to effectively use traffic leverage—to award traffic to carriers in exchange for lower rates and improved service. Effective use of leverage would allow ASCS to better use its advantages (e.g., multiple locations, large volumes) to compensate for its disadvantages (e.g., limited ability to control movements, lack of competition in certain areas).

However, effective use of traffic leverage requires that ASCS have a thorough knowledge of its traffic base (e.g., shipment volumes and origins and destinations) and use that information to develop and implement a negotiating strategy. Such a strategy would enable ASCS to negotiate shipments in a systematic, rather than ad hoc, fashion. Although ASCS will probably never be able to negotiate all of its shipments, we believe opportunities exist for improved effectiveness in negotiating both large and small shipments. For example, Bunge and Cargill officials estimated that 80 to 95 percent, respectively, of their grain tonnage to the Gulf ports moved under negotiated rates. ICC summary information showed that private grain shippers had at least 155 negotiated shipping contracts in effect in 1985 with North Dakota origins. In light of these levels of negotiating activity, we believe that ASCS can negotiate rates on its shipments to the Gulf ports and on its North Dakota shipments more often than it now does.

To enable them to compete more effectively in a deregulated environment, other shippers have

- placed greater emphasis on planning, which allows them to more effectively use traffic leverage and prepare for contingencies;
- increased their use of automation to assist in developing information on traffic patterns, rates, and carrier costs—useful in formulating negotiation strategies and rate proposals; and
- developed staff skills and expertise in business-related areas, such as negotiations and marketing.

ASCS has done little in any of these areas. In addition, ASCS has not developed (1) written policy, guidelines, or criteria specifying when its transportation specialists should negotiate or (2) a system for tracking when negotiations occur or for monitoring its transportation specialists' performance. Such management actions are necessary so that ASCS can (1) assure a consistent approach to negotiations and (2) evaluate its negotiating effectiveness and make necessary adjustments.

Negotiating rates with railroads has produced substantial cost savings, and ASCS transportation officials agree that improvements in ASCS' transportation management are needed. However, they point out that budgetary constraints limit their ability to hire additional staff or to provide formal business-related training. Alternative ways exist, however, for ASCS to incorporate additional expertise into its transportation management functions.

Transportation consultants are available on an as-needed basis to help develop and implement negotiation strategies. In addition, some shippers have suggested that ASCS use private sector expertise in negotiating with carriers. ASCS has, on occasion, moved its grain under contracts belonging to elevators where its grain was stored. The elevator benefits from this arrangement because the ASCS shipments help fulfill the elevator's volume requirements as negotiated with the carrier. In these instances, ASCS was not told what rate the elevator was paying. Rather, it negotiated a separate rate with the elevator for an amount less than the tariff rate. If ASCS is to collaborate with the private sector and negotiate joint rates, it should do so as an equal partner, with access to contract terms.

ASCS has begun taking steps to improve its ability to negotiate. It has reevaluated its use of transit privileges and now plans to move grain at the cheapest cash outlay at that point in time. In addition, it has begun reporting transportation savings resulting from negotiations. Such reporting demonstrates what can be achieved through successful negotiations. However, the reports' reliability and utility would be enhanced if the data used in computing the savings were documented. In addition, ASCS has, in the last several months, hired additional transportation specialists, started using a minicomputer to capture rate information, and begun analyzing staff training needs.

Other management actions, such as developing and implementing policies and criteria to guide and evaluate negotiation activities, are necessary as well. These actions will require that ASCS management give more attention to strengthening its response to rail deregulation. Such attention is necessary for ASCS to take increased advantage of opportunities for cost savings and service improvements.

Recommendations to the Secretary of Agriculture

We recommend that to increase ASCS' negotiating effectiveness and take better advantage of potential cost savings and service benefits, the Secretary of Agriculture direct the Administrator, ASCS, to develop the following.

- A written policy setting forth ASCS' goals and strategy for managing rail shipments in the current deregulated environment:

  (1) The policy should include a plan for maximizing ASCS' negotiating leverage, incorporating factors such as using business in competitive areas to achieve rate concessions in low-volume, noncompetitive areas; whenever possible, selecting grain elevators with storage and loading facilities suited to larger, multiple-car loading; and concentrating shipments among railroads to achieve optimum rates and service.

  (2) The policy should also incorporate criteria prescribing when negotiations should be pursued and providing guidance on how they should be conducted—for example, how to determine appropriate discounts. On the basis of this guidance, management should establish periodic performance goals.

We recommend that to help implement the new rail negotiation policy, the Secretary also require that the Administrator, ASCS, develop and enhance the following.

- An automated management information system to provide information needed by transportation specialists to effectively negotiate rail rates:

  The system should include data on ASCS' traffic base, e.g., number of rail shipments, shipment origins and destinations, volume and cost of rail shipments, and number of negotiated and nonnegotiated shipments. This information should also be used to evaluate negotiating performance and monitor performance goals.

- ASCS' negotiating expertise:

  Existing expertise should be enhanced by (1) establishing a training program for ASCS transportation specialists to augment negotiating skills and (2) determining what additional business-related expertise is needed and obtaining it through use of consultants and/or collaboration with private sector shippers.

Agency Comments and Our Evaluation

Overall, ASCS agreed with the general thrust of the report and cited several actions it taking to increase its negotiating effectiveness. In addition, ASCS provided several specific comments that it believed should be included in the final report. Each of these comments and our evaluation of them follow.

ASCS Comment

ASCS commented that through November 1986 it had over 500 negotiated agreements with railroads—up from the 103 agreements we reported in 1985. According to ASCS, savings on negotiated agreements between January and November 1986 totaled about $21 million. For the same period, it estimated its rail grain freight costs at about $64 million.

Our Evaluation

While the number of ASCS-negotiated agreements increased from 103 in 1985 to over 500 in 1986, this increased number does not, by itself, indicate that more ASCS grain is actually moving under negotiated rates. It does not, for example, enable ASCS management or us to determine the amount or percent of freight tonnage that moved under negotiated agreements in 1986 or what percent of ASCS' 1986 rail grain shipments were negotiated. ASCS could not provide this information as of December 1986, and without it, an accurate assessment of ASCS' negotiating performance cannot be made. (In this regard, it should be noted that a negotiated agreement can cover one or many shipments throughout the year. Thus, an increased number of negotiated agreements do not necessarily result in an increase in the number of shipments or amount of grain tonnage moving under negotiated rates.) Nonetheless, we believe that the increased number of negotiated agreements in 1986 shows that ASCS is giving more attention to this aspect of transportation operations. We have added language to chapter 2 of the report acknowledging that ASCS reported over 500 negotiated agreements in 1986.

With regard to ASCS' comment that it realized savings of $21 million on negotiated agreements through November 1986, we have included this information in chapter 2. It should be emphasized, however, that these savings could not be verified. ASCS officials could not provide us with supporting documentation showing the basis for their savings estimate. As a result, the savings estimate, like the number of 1986 negotiated agreements, may or may not indicate that ASCS' negotiating effectiveness has increased over previous years.

ASCS commented that its total rail grain costs between January and November 1986 are about $64 million. We have added language to chapter 2 to acknowledge this fact.

ASCS Comment

In recognition of the importance of increased use of negotiated rates, ASCS commented that it has taken several steps toward enhancing the agency's negotiating effectiveness. Specifically, it said it (1) has added two freight rate specialists and is in the process of adding two more, (2) is in the process of analyzing training needs for current staff to increase their negotiating skills, and (3) has developed a historical rate file on a minicomputer so that its transportation specialists can have ready access to previously negotiated rate data for use in current negotiations. ASCS also commented that information can be developed from a new information system—the Grain Inventory Management System—which will assist it in developing data on traffic patterns and transportation expenses.

Our Evaluation

With regard to ASCS' comment that it has hired two additional freight rate specialists and is in the process of hiring two more, we believe that this is a positive action, which should strengthen ASCS' negotiating efforts. As discussed in the report, the Chief of KCCO's Traffic Management Division cited lack of personnel as the major constraint to increased negotiations. The additional staff should diminish this constraint.

As recommended in the report, ASCS has begun to analyze the training needs of its transportation specialists. Its objective is to increase the negotiating skills of its current staff. We support ASCS' actions in this regard and encourage ASCS to proceed as expeditiously as possible. As noted in our report, we believe that the current transportation staff could benefit greatly from this initiative. Further, we agree with the Chief of KCCO's Traffic Management Division that particular attention should be given to the areas of marketing, economics, and communications.

In its comments, ASCS stated that it has developed a rate file on a mini-computer in order to provide its transportation specialists with ready access to historical data for use in current negotiations. This is a first step. However, as stated in our recommendations, in order for ASCS to enhance its negotiating position and take full advantage of potential cost savings, ASCS needs a comprehensive automated information system. This system should contain, among other things, information on the number of rail shipments, shipment origins and destinations, volume and cost data for each shipment, and whether each shipment was made under negotiated or nonnegotiated rates. This kind of information would enable negotiators to determine traffic patterns, past negotiating experience, and leverage possibilities. The rate file referred to in ASCS' comment does not include this kind of data. In this same context, ASCS commented that it can develop information from the new Grain Inventory Management System which, when implemented, will assist in developing information on traffic patterns and costs. However, the Chief of KCCO's Traffic Management Division said he hoped to obtain changes in the system so that it could provide the necessary information in a more timely and usable form.

ASCS Comment

ASCS expressed concern that we did not give adequate consideration to the negotiating constraints it faced in 1985. In particular, ASCS said that private grain shippers, and presumably TVA and DOD, are better able to predict volumes and movement directions. ASCS asserted that it cannot predict volumes and movement directions as accurately because ASCS' grain transportation is not market-oriented but tied to the price-support program. When, where, and if it acquires inventory depend on market performance in relation to loan levels and other price-support activities. ASCS contends that, with respect to TVA and DOD, different cargo with entirely different rate structures are involved. According to ASCS, TVA and DOD freight generally moves on high-density routes. ASCS stated that such a pattern is more consistent with traffic operations on ASCS' processed commodities and that, in fact, it has been able to negotiate more successfully on processed commodities.

ASCS also noted that the grain industry's and railroads' early involvement in negotiations was mostly time/volume contracts—the very kind of situation that ASCS cannot utilize because of the unpredictable nature of its shipments.

Our Evaluation

We do not agree with ASCS' comments on this point. As discussed in the report, information obtained from private grain shippers, railroad officials, and ICC indicates that successful negotiations do not depend on the ability to make volume commitments. Grain shipper and railroad officials generally acknowledged that the grain industry is a dynamic business and that it is often difficult for shippers to accurately predict volumes. Railroad officials said that inability to accurately predict volumes did not preclude negotiations and that advance knowledge of volumes was but one factor they considered in negotiating with shippers.

Further, methods exist to negotiate contracts that are not based on specific volume commitments. Summary information ICC provided to us on 1985 private grain shipper contracts with Kansas and North Dakota origins indicated that about one third of these contracts had a percentage-of-business provision rather than a specific volume requirement. Under this provision, a shipper agrees to give the carrier a certain percentage of business from a particular location(s) for the contract's duration. Such an agreement obviates the need to accurately predict volumes since the discount is based on a percentage of business, whatever amount that business ultimately turns out to be.

With regard to ASCS' being unable to predict movement directions because its grain transportation is tied to the price-support program, our report recognizes that ASCS' limited ability to control movement directions does limit its ability to make optimal use of transportation economies. However, we also maintain that this constraint may be diminished through improved planning and negotiating strategies.

For example, ASCS commented that when and where it acquires inventory depend on market performance in relation to price-support loan levels and, ultimately, the independent decisions of thousands of individual farmers. While we do not question this statement's accuracy, we do question the degree to which this situation precludes ASCS from predicting grain movements. While the specific amount of grain going into the loan program varies each year, grain production areas (shipment origins) generally remain unchanged, i.e., grain production is concentrated in the Plains and North Central states. Similarly, although the frequency of specific movements changes, there are repetitive movements each year, e.g., from Kansas City to the Gulf ports and from North Dakota to Minneapolis/St. Paul.

By developing information on past grain movements/volumes, ASCS would be better able to plan future movements and develop an overall negotiating strategy for managing its rail shipments.

With regard to differences between TVA, DOD, and ASCS, we believe that although they generally ship different cargo, there is a basic similarity in that each is a federal organization that ships large quantities of goods by rail in a deregulated environment. The similarities between DOD and ASCS are particularly noteworthy. In its recent policy study on rail deregulation, DOD noted that much of its rail traffic consisted of sporadic, single-shipment movements, many of which were in remote locations that did not lend themselves to negotiating competitive rates. The study concluded that to diminish the effects of this situation, DOD's negotiators needed to maximize use of DOD's traffic leverage. According to the study, essential to DOD's effective use of leverage is a strengthened transportation planning process and, among other things, a comprehensive knowledge of its traffic base. As already noted, we believe these conclusions are applicable to ASCS as well.

ASCS Comment

ASCS questioned the extent to which it can use leverage in competitive areas to achieve savings in noncompetitive areas. ASCS contended that to do this assumes that it can predict volumes and directions of movements to enable it to apply leverage or that both movements will take place at the same time. Neither of these is true according to ASCS. ASCS said that loan forfeitures changed grain inventory locations. Therefore, ASCS cannot predict locations and volumes of grain at any one time and does not know where or when it will be asked to reconcentrate grain.

Our Evaluation

As one of the nation's largest grain shippers, ASCS possesses significant traffic leverage that can be used in negotiating rates with railroads. But, to use its leverage effectively, ASCS must have a thorough knowledge of its traffic base so that it can develop an overall negotiating strategy. Such a strategy would enable ASCS to incorporate methods such as using business in competitive areas to obtain rate concessions in low-volume, noncompetitive areas and concentrating shipments among railroads to achieve optimum rates and services. We believe that ASCS' lack of an overall negotiating strategy and insufficient information on its traffic base has limited its use of leverage to a greater degree than its difficulty in accurately predicting shipment volumes and directions.

ASCS Comment

ASCS commented that the report's explanation of transit privileges is inadequate and fails to give adequate weight to its importance in 1985. According to ASCS, in 1985 it held large volumes of transit (i.e., grain tonnage for which transit privileges would apply), much of which was highly valuable. The first movement into storage had already been paid by ASCS or by producers of grain subsequently forfeited. The carrier's income on the second movement was either insignificant or involved a refund to ASCS and there was no reason to reduce those rates. Therefore, any effort to secure negotiated rates would not have been worthwhile.

Our Evaluation

As stated in the report, under transit privileges, ton-mile rates on the initial movement of grain are generally higher than the ton-mile rates on subsequent movements. Thus, when it uses transit, ASCS pays additional money up front for transit privileges that it may or may not later use. (Transit privileges generally are good only for 12 to 18 months, although under certain conditions they can be extended upon payment of an additional charge.) This being the case, ASCS may not have been prudent in acquiring transit privileges initially, rather than negotiating for flat (point-to-point) rates. In December 1985 ASCS did, in fact, change its policy with regard to transit. KCCO's deputy director announced at that time that ASCS would no longer normally pay additional monies to accrue benefits, such as transit privileges, that it may not use in the future.

In addition, except for Kansas, Texas, and Oklahoma, transit privileges are rarely used. In 1985 these states accounted for about 16 percent of ASCS' grain shipments. In comparison, about 31 percent of its rail shipments originated from North Dakota and 23 percent from Minnesota, states where transit privileges would normally not be used. Thus, in 1985 transit would have affected only a relatively small percentage of ASCS' shipments. Consequently, we do not agree that this point was understated in the report.

Sample Estimates and Sampling Errors of Types of Negotiated Shipments

Figures in percent

Nature of shipment	Best estimate	Sampling error (95% level)	Confidence limit Lower	Upp[illegible]
All ASCS shipments	10.0	3.9	6.1	1[illegible]
Kansas City to Houston/ Galveston	39.6	8.6	31.0	4[illegible]
Tonnage of all ASCS shipments	21.1	6.9	14.2	2[illegible]
Top 20% of all ASCS shipments	26.0	9.6	16.4	3[illegible]
Bottom 80% of all ASCS shipments	5.5	4.2	1.3	[illegible]
Originating from North Dakota	0.0	[a]	0.0	[illegible]

[a]As the sample contained no negotiated shipments, a noncentral confidence interval was computed. This procedure does not yield an estimate of a sampling error but does provide confidence limits.

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