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# THE ROLE OF "REGULATED" MOTOR CARRIERS IN HAULING AGRICULTURAL COMMODITIES IN INTERSTATE COMMERCE 1/

Ever since motor carriers began to haul substantial volumes of agricultural commodities, there has been much interest in the relative tonnage moved by the motor carriers as well as railroads, the major volume hauler up to a few years ago. Some studies have explored truck volume and flow patterns, but few have dealt in detail with the so-called "regulated" motor carriers in regard to hauling agricultural products.

## The Regulated Motor Carrier Industry

Motor carriers can be classified in 2 ways: "regulated" and "nonregulated."

Regulated motor carriers are those subject to both safety and economic regulation by the Interstate Commerce Commission. These carriers, however, are not subject to economic regulations such as prescribing of routes and the publishing of rates when hauling exempt agricultural commodities, provided they move no non-exempt commodities, such as industrial manufactured products, in the same truck at the same time. These regulated motor carriers are either common carriers, who serve the public generally, or contract carriers, who serve only a few shippers on a selective basis.

The nonregulated motor carriers constitute the largest segment of the trucking industry and handle the bulk of agricultural truck traffic. They are either exempt for-hire or private carriers. The ICC prescribes only safety requirements for these haulers; it does not control such things as rates, entry, and route authority.

## Characteristics Of Regulated Motor Carriers

The regulated motor carrier industry is composed mainly of small individual proprietorships and partnerships. Most firms have small territories. Nevertheless, a number of very large concerns cover a broad geographic area. In 1962, 576 Class I common motor carriers of general freight had combined revenues in excess of \$3 billion.

The majority of the commodity hauls by regulated motor carriers are single-line movements of higher-valued, low-weight manufactured products in small lots.

Regulated motor carriers generally find it extremely difficult if not impossible to compete with the exempt for-hire or private motor carriers for most of the available agricultural traffic. 2/

## Why Regulated Carriers Haul Agricultural Products

Hauling of agricultural products appeals to the regulated motor carriers because it enables them to (1) help balance their operations, and (2) curtail the effects of seasonality and irregularity of freight movements.

Few motor carriers have such balance of traffic that they do not need to worry about the "backhaul problem." Many operators face this problem daily. A large Georgia carrier, for example, has a very heavy miscellaneous southbound

1/ Prepared by Joseph R. Potter, Jr., agricultural marketing specialist, Marketing Economics Division, Economic Research Service, USDA.

2/ Concrete examples are limited, but three significant studies point up this hypothesis: (1) Interstate Trucking of Fresh and Frozen Poultry Under Agricultural Exemption, USDA, MRR 224, March 1958; (2) Interstate Trucking of Frozen Fruits and Vegetables Under Agricultural Exemption, USDA, MRR 316, March 1959; and (3) Supplement to Interstate Trucking of Frozen Fruits and Vegetables Under Agricultural Exemption, USDA, MRR 316, July 1961.

movement into Florida. His main hope of securing a backhaul rests in moving such agricultural products as watermelons, peanuts, and various fruits and vegetables northbound. The backhaul problem appears to be greatest in the lesser industrialized areas of the United States. High operating costs, large capital investments, and other factors put continued pressure on regulated motor carriers to utilize their equipment as much as possible; and agricultural freight in many cases fills the bill. 3/

A marked seasonality and irregularity exists in the movement of traffic for the United States as a whole. For example, larger-than-normal shipments can be expected from manufacturers in anticipation of the Christmas and Easter seasons. In addition, intensity of traffic fluctuation varies greatly for the individual carriers. Differences also exist in the time of year when their peak traffic occurs. The entire transportation equipment of a company should be adequate to handle the traffic during peak periods. If this were so, a substantial part of the truck fleet would stand idle over a considerable period of time. Interest on investment, depreciation, tied-up capital, and other

fixed costs continue whether the equipment turns a wheel. Thus, fluctuations--like the backhauling problem--cause many regulated carriers to seek out agricultural traffic.

#### Agricultural Traffic Originated By Class I Motor Carriers

Statistics are limited for measuring the trend of farm-originated tonnage moved on highways. The most accurate figures available on the volume and kinds of agriculture products handled by regulated motor carriers are those published by the Interstate Commerce Commission (table 11). 4/ Since 1956, the Commission, has issued an annual report on motor carrier freight commodity statistics, which indicates the volume of truck-load business done by the regulated motor carriers according to commodity groups and classes. 5/ These figures do not represent totals for the entire regulated motor carrier industry, since they cover only tonnage moved by Class I common and contract carriers. However in terms of revenue, the Class I motor carriers (those earning \$1,000,000 and over) are the most important group of regulated

3/ Faced with what can be termed "fierce" competition and diminishing returns on investment, truckers have been demanding ever-more-versatile equipment from equipment manufacturers in their fight for traffic. A number of significant developments in the trucking equipment field can be expected to contribute to more effective freight movement at less cost through maximum utilization of units. Some of the developments include a convertible trailer that switches from an open-top to a flat-bed unit quickly and easily without use of special tools, a combination refrigerated van and cattle trailer, and a dual-purpose van that hauls and unloads flour, sugar, starch, meal or other bulk materials and then converts to a conventional freight van.

4/ Occasionally a State trucking association will issue information on the amount of agriculture products moving within or from that State by regulated motor carriers. Such a report was published by the Alabama Trucking Association of Montgomery, Alabama, entitled Alabama's Rollin' Lifeline. This report, which covered the 1957 movements of major crops to the 13 most important produce markets, showed regulated carriers hauling 39,600 bushels of snapbeans, 1,620,000 pounds of tomatoes, 172,800 quarts of strawberries, 535,000 watermelons, and 230,000 dozen green corn.

5/ In a 1957 decision in Ex Parte No. 205, Motor Carrier Freight Commodity Statistics, the Interstate Commerce Commission ruled that freight commodity statistics filed by individual motor carriers should not be made public. However, the ICC has recently modified its rules (Docket No. 34515, Commodity Statistics Reporting--Extent and Disclosure) to provide that individual reports of motor carriers be made available for public inspection.

Table 11. --Agricultural traffic originated by Class I common and contract motor carriers of property 1/

Commodity Group	1956	1957	1958	1959	1960	1961 2/
	Thous. tons	Thous. tons	Thous. tons	Thous. tons	Thous. tons	Thous. tons
	dol.	dol.	dol.	dol.	dol.	dol.
Products of agriculture:						
Grains and grain products	499	4,756	603	6,330	606	6,316
Cotton, sugar, and tobacco	265	2,186	326	2,453	537	2,689
Fruits, melons, and beverage crops	1,173	14,579	1,078	14,266	1,273	16,527
Vegetables	1,891	10,788	1,858	13,518	1,850	12,984
Hay, seeds, and minor field crops	160	1,822	191	2,345	174	2,316
Oilseeds, fats, and oils	371	5,477	423	6,106	414	6,286
Products of agriculture, NOS	196	3,023	174	3,322	216	3,808
Total	3,555	42,631	4,653	48,340	5,070	50,926
Animals and products:						
Animals and products	2,506	61,806	2,842	65,891	2,707	66,228
Dairy and poultry products	1,367	18,969	1,357	18,851	1,333	18,387
Fish and oil	67	1,821	63	1,790	94	2,529
Animals and products, NOS	111	1,495	105	1,455	105	1,460
Total	4,051	84,092	4,367	87,987	4,239	88,604
Total	7,606	126,723	9,020	136,327	9,309	139,530
All regulated truckload traffic including agriculture commodities						
Agricultural traffic handled by Class I railroads	143,064	1,454,098	146,035	1,575,252	141,311	1,526,536
Agricultural traffic as a percentage of the total regulated motor carrier movement	5.3	8.7	6.2	8.7	6.6	9.1

1/ Includes only products included by ICC in categories entitled, "Products of agriculture" and "Animals and animal products".

2/ Latest year for which data are available. Freight Commodity Statistics, Interstate Commerce Commission.

motor carriers, accounting for more than 60 percent of the total operating revenues. 6/ Also, local tonnage, virtually all of which is handled by truck, is not reflected in these statistics. While Class II and III motor carriers also are required to submit annual reports of a limited nature, the ICC has not compiled these figures in summary form on a year-to-year basis. The figures developed specifically for the Class I motor carriers correspond closely with an estimate given in 1963 by an ICC Commissioner. He stated that agricultural commodities constitute 3.8 percent of the total tonnage hauled by all regulated motor carriers and accounted for roughly 4 percent of their gross revenues. 7/

This estimate and the statistics of table 11 appear to point out that the importance of agricultural traffic to the regulated motor carrier industry in the aggregate is relatively small. At no time over the 6-year period did agricultural commodities account for more than 6.6 percent of the total truck load traffic of Class I carriers nor contribute more than 9.5 percent to their total revenue. Furthermore, the regulated Class I motor carriers' relatively subordinate position is fairly evident when its operations are compared with composite railroad statistics for the same period. (See table 11) While the railroads dominate in the aggregate, the Class I motor carriers are

moving greater quantities of fresh berries, peaches, tomatoes, dried and frozen vegetables, leather, dressed, frozen and live poultry, margarine, eggs, cheese, miscellaneous dairy products, wool and mohair, and seafoods. Generally, these latter products are those of reduced bulk and relatively high-unit value which can support the heavier regulated motor transportation charge. 8/

#### Regulated Motor Traffic Trends In 7 Perishable Farm Products

From 1956 to 1961 the regulated motor carriers increased their hauling of the more profitable, high-value agricultural traffic by roughly 42 percent--an average annual growth rate of 9.5 percent (table 12). 9/ In 1961, these 7 commodity groups or classes accounted for 43.2 percent of total agricultural tonnage moved by Class I regulated motor carrier, and contributed 53.8 percent to their gross agriculture freight revenues.

Fresh meats, are by far the most important agricultural commodity hauled by these carriers. Of all the freight they moved in 1961, only 6 classes out of a total of 260 separate freight categories contributed more to the Class I carriers' total gross freight revenue. Hauling of fresh meats by regulated Class I motor

6/ Transportation in Agriculture and Business, by David E. Moser and Wesley R. Kriebel, Extension Division, University of Missouri, Columbia, Missouri, Manual 63, 1964.

7/ Effect of Freight Rate Deregulation on Shippers, Carriers and Marketing, by Lawrence K. Walrath, Commissioner, Interstate Commerce Commission, speech of November 21, 1963, before the American Trucking Associations' annual convention in Miami, Florida.

8/ Rail traffic in highly perishable farm products declined sharply during the last 15 years--in some cases almost to the vanishing point. See "The Role of Railroads in Hauling Farm products," The Marketing and Transportation Situation, November 1963.

9/ Recently Division I of the ICC granted 18 regulated motor carriers rights to haul potato products and specified frozen foods from western origins to points in a number of western, midwestern, and southern States. The decision was based on a summary of shippers' evidence which showed that insufficient service was presently available for transportation of these items. "ICC grants 18 Motor Carriers Rights to Haul Potato Products, Frozen Foods," Traffic World, April 25, 1964.

Table 12.--Regulated Class I motor carrier revenue from seven classes of agricultural commodities moved in large volumes 1956-1961

Commodity	Gross freight revenue					
	1956	1957	1958	1959	1960	1961
	Thous. dol.	Thous. dol.	Thous. dol.	Thous. dol.	Thous. dol.	Thous. dol.
Fresh meats .....	39,238	44,733	44,615	50,774	53,938	56,780
Edible packing- house products .....	10,675	7,101	7,552	9,160	9,942	8,856
Cooked, cured, dried, and smoked meats .....	6,859	7,667	7,287	8,067	7,980	7,342
Miscellaneous dairy products .....	3,289	2,656	4,235	5,667	6,028	6,748
Cheese .....	4,536	4,568	5,336	5,089	5,978	5,699
Frozen vegetables .....	2,518	2,044	2,158	4,486	5,749	5,604
Miscellaneous seafood .....	442	1,644	2,261	3,188	3,523	4,911
Total .....	67,557	70,413	73,444	86,431	93,138	95,940

Freight Commodity Statistics, Interstate Commerce Commission.

carriers was most significant in the northwestern and midwestern region of the United States. 10/

#### Regional Traffic And Revenue Trends For Class I Regulated Motor Carriers

The movement of agriculture commodities by regulated motor carriers is of more importance in terms of aggregate revenues in some regions than in others (table 13). On the basis of the 1956-61 data, the 3 regions with the greatest percentage growth in tonnage originated were the Rocky Mountain, Southwestern, and Southern regions. In 1961 these 3 regions accounted for 27 percent of the total U.S. Class I motor carrier agricultural tonnage originated and 36 percent of the gross revenue received (table 13).

Each of these areas, incidentally, has an acute backhauling problem for the regulated carriers.

In terms of tonnage originated in 1961, the Pacific region was the most important, followed by the Southern and Central regions. However, in terms of gross freight revenues from tonnage hauled, the Southern region led with a return of \$35.7 million and with the Central and Midwestern regions trailing considerable. The highly industrialized New England region ranked last in both tonnage and gross revenue in 1961.

Within each of these regions some highly important agriculture movements occurred. The Pacific region, as the largest originator of the "products of agriculture" hauled by regulated motor

10/ The Interstate Commerce Commission divides the U.S. into 9 regions for the reporting of the freight commodity statistics of Class I common and contract carriers: new England Region--Conn., Maine, Mass., N.H., R.I., and Vt.; Middle Atlantic Region--Del., D.C., Md., N.J., N.Y., Pa., and W. Va.; Central Region--Ill., Ind., Mich. (lower peninsula), and Ohio; Southern Region--Ala., Fla., Ga., Ky., Miss., N.C., S.C., Tenn., and Va.; Northwestern Region--Mich. (upper peninsula), Minn., N. Dak., S. Dak., and Wisc.; Midwestern Region--Iowa, Kans., Mo., and Nebr.; Southwestern Region--Ark., La., Okla., and Tex.; Rocky Mountain Region--Col., Idaho, Mont., N. Mex., Utah, and Wyo.; and Pacific Region--Ariz., Calif., Nev., Oreg., and Wash.

Table 13.--Regulated Class I motor carrier revenue and traffic volume, agricultural commodities, by regions, selected years

Region	1956		1959		1961	
	Tonnage originated	Gross revenue	Tonnage originated	Gross revenue	Tonnage originated	Gross revenue
	Thous. tons	Thous. dol.	Thous. tons	Thous. dol.	Thous. tons	Thous. dol.
New England .....	202	2,829	220	3,001	225	3,215
Middle Atlantic ..	777	7,302	893	10,692	1,209	13,009
Central .....	1,223	28,328	1,382	30,091	1,245	26,759
Southern .....	771	21,615	1,232	30,985	1,430	35,740
Northwestern .....	697	8,645	852	10,839	1,052	20,442
Midwestern .....	973	19,123	1,252	24,174	1,178	25,684
Southwestern .....	369	10,119	659	16,252	790	17,839
Rocky Mountain .....	276	8,070	464	13,408	503	11,196
Pacific .....	2,318	20,692	2,508	20,371	2,533	24,350
Total .....	7,606	126,723	9,472	159,813	10,165	178,264

Freight Commodity Statistics, Interstate Commerce Commission.

trucks, had several "firsts." It led the other regions during 1961 in the hauling of wheat, cotton, tomatoes, fresh peaches, and sugar beets.

#### Individual Motor Carrier Participation In Agriculture Traffic

While the importance of agriculture traffic to the regulated Class I motor carriers is small, to some regulated carriers agriculture freight constitutes a significant share of their total business. The Director of Farm Relations of the American Trucking Association, Inc., recently asserted in an interview with the writer that many carriers of refrigerated products rely heavily upon farm products. For example, 1 carrier in the southwest reported that agricultural commodities make up 20 percent of its total tonnage and 15 percent of its total revenue. It further reported that 75 percent of its return hauls from California to Texas consist of agricultural commodities. A Florida-based carrier reportedly depends almost 100 percent upon agricultural commodities for its return hauls, while more than 10 percent of its outbound (Florida-West) hauls in agricultural freight.

In addition, he stated that several of the largest regular-route common carriers are heavily engaged in transporting agricultural commodities. For instance, 1 of the largest carriers in the Nation hauled over 600 truckloads of carrots from California to the East last year, while another carrier operates a daily livestock transportation service from Billings, Mont., to Chicago, Ill. Others are moving grain in large quantities from the Great Plains into Chicago and the river ports of the Midwest.

#### Significant Agricultural Movements By Regulated Motor Carriers

Two of the more significant operations of regulated motor carriers in agriculture involve meat and packinghouse products and wool. As indicated earlier, meat is by far the most important for the regulated Class I common and contract motor carriers. In 1961, this segment of the regulated carrier industry alone hauled 2.6 million tons of meats and packinghouse products, which produced about \$73 million in gross revenue to the carriers (table 12). One of the top U.S. packers

reported that 40 percent of its shipments of fresh processed and canned meats move by regulated common carrier truck.<sup>11/</sup> This illustrates the dependence of this particular industry on regulated carriers.

Recently that company, in conjunction with a large Class I regulated motor carrier,<sup>12/</sup> and a steam ship company made a test shipment of 36,000 pounds of packaged frozen pork from its plant at Fremont, Neb., to Hawaii.<sup>13/</sup> This marked the first time that a frozen, perishable product was moved in a sealed shipping container and hauled from an interior point cross-country by truck and the loaded "as is" on a vessel. This self-contained refrigerated trailer unit, which permits the movement of a highly perishable commodity from origin to destination without being disturbed, eliminates several of the major problems which had previously plagued frozen food shippers and handlers. Present rail rates from the Midwest to the West Coast on fresh meats were published because of regulated common carrier motor competition.<sup>14/</sup> Generally speaking, it is highly unusual when regulated common carriers offer enough competition in the hauling of agricultural products to become a rate setter.

The Economic Research Service, in studying the various flow patterns of grease and scoured wools from 14 western States, has found that regulated motor carriers play a highly significant role in the numerous movements of wool throughout that major-producing area. Of the 36 million pounds of grease wool

moving to scouring plants located in the West, motortrucks handled more than 98 percent, with the remainder going by railroads. Of the 98 percent moving via trucks, ICC regulated carriers accounted for 33 percent.

In the study, warehouse operators reported that approximately 22 percent of the wool shipped from their plants to the East was transported by regulated motor carriers. None was moved by non-regulated carriers. The warehousemen preferred the regulated motor carriers because they offered more flexible and reliable service. Because of baling--it increases the density of the wool package--regulated carriers can now compete economically with railroads for longer wool movements, such as those that originate in South Dakota and move to Rhode Island and Virginia.

#### Prospects For Regulated Carriers As Haulers Of Agricultural Products

Even though national statistics are lacking, available evidence indicates that the hauling of agriculture products, except for a few specific cases, will continue to be minor in the total scheme of the regulated motor carrier industry. However, 3 factors could change this situation. The first would be any change in Government laws, regulations, or policies affecting the operations of regulated motor carriers. Second is the continued growth of the private carriers. While few agree on the exact rate of growth in the use of privately-owned transportation equipment, most conclude that it has been growing more

<sup>11/</sup> "Meat Packers Move to Fatten Profits," by Nancy Ford, Traffic Management, December 1963.

<sup>12/</sup> This carrier also established another first when it recently announced that 1 of the largest transcontinental shipments of fresh, chilled orange juice ever hauled by tank-trailer was being carried by its bulk commodity division. Sixty-five tanker loads, averaging about 5,000 gallons, were involved in a shipment from Ontario, Calif., to Glenroy, Pa. The receiver bottles the juice and sells it to dairy firms for delivery with their milk orders. Up to this time nearly all fresh orange juice used in the eastern United States had come from Florida. "Fresh Orange Juice Hauled West to East by Ringsby," Traffic World, September 12, 1964.

<sup>13/</sup> "Ringsby-Matson Link for Frozen Foods on Interline to Hawaii," Transport Topics, April 27, 1964.

<sup>14/</sup> See Fresh Meat, Transcontinental Westbound, 309, ICC 529.

rapidly than other segments of the motor transportation industry since World War II. It has been estimated that 92,000 non-transportation firms do some or all of their own hauling and some do occasional for-hire hauling.<sup>15/</sup> This is considerably more than the number of regulated carriers now operating in the United States. As a result of this steady increase, greater pressures will be exerted to find new traffic to fill the

void caused by the loss of valuable traffic siphoned off by the private carriers.

A third factor affecting the outlook, is the increase consolidations, mergers, and acquisitions taking place in the motor transportation industry. Greater carrier operating problems, especially "back-hauling," caused by these new realignments will force regulated motor carriers to reevaluate their hauling of farm products.

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<sup>15/</sup> Management of Traffic and Physical Distribution, Charles A. Taff, 1964.



