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# Wheat Lineary Transportation in Perspective

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in cooperation with
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# Wheat Transportation in Perspective

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Transportation has had many historic moments. In the northeast, the Fulton steamboat went up the Hudson in 1806. The Erie Canal was completed in 1825.

West of the Appalachians, trade routes developed along the rivers. In 1815, a total of 40 steamboats arrived in New Orleans; 10 years later, arrivals reached 502. By 1860, 10 steamboats were docking each day, carrying people, grain and livestock products.

But a new era had already opened back in 1830, when a horse lost a race staged between it and a steam locomotive.

Between 1830 and 1850, railroad line-haul trackage expanded from a few miles to over 9,000 miles. By 1853, Chicago was connected with the East by rail. In 1869 the first transcontinental railroad was completed. Trackage expanded until 1929 when over 249,000 miles were in operation. Since then, abandonments have decreased total trackage in operation to about 200,000 miles.

Grange laws initiate regulation, but Supreme Court was forced to rule

In the Great Plains, railroads became virtually the only way immigrants could move in and farm products could move out to the markets.

# 5918700 Feeding off the east-west mainlines were countless branch lines run by almost as many small companies. The race to expand trackage sometimes led rail companies into ruthless competition with each other. Often passed over in favor of the larger shipper, farmers and small businessmen who had been attracted to the West largely by railroad promotion began to feel they were being discriminated against.

Eventually, a farmers organization, the Grangers, gained the balance of power in several state legislatures. Illinois, Iowa, Minnesota, and Wisconsin were among the first to initiate laws to protect the public from what they saw as unfair railroad practices.

The solution, as the Grange laws read, was state regulation. These laws prescribed maximum rates, set up railroad commissions to administer the laws, and initiated the "long- and short-haul clauses." These latter prevented railroads from charging a higher rate for a short haul than for a long haul over the same line.

Federal government takes over regulation, railroads respond with transit rates

Railroad lawyers sought to evade these regulations by appealing to the courts; the Munn vs. Illinois case eventually reached the U.S. Supreme Court. Regulation, said the lawyers, violated the 14th Amendment which forbade the state from depriving a person of property without due process of law. Rate setting deprived corporations of the free use of their property.

The Supreme Court ruled differently: "When one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good."

So the power to regulate interstate commerce became the responsibility of the federal government. This decision led to the passage of the Interstate Commerce Act in 1887.

This produced some far reaching effects upon grain marketing: Rail rates were to be reasonable; long- and short-haul rates were established; and of singular importance, railroads had to publish their rates.

Interstate regulation of rail shipments tended to stabilize and equalize rail rates for grain and grain products moving from producing areas to consuming areas. However, there was still room within the law for a railroad to get and keep grain traffic, once it was on its line.

A transit rate was one method. If a shipper, usually an elevator, used a transit rate (sometimes called a transit privilege), his commodity could be off loaded and stored or handled anywhere along the line, then reloaded and shipped to the ultimate destination at the original rate. Proportional and transit rates encouraged shippers located at rail centers who received grain by one railroad to reship the grain or its product by the same railroad, even though the shipper may have had access to other lines going in the same direction.

Between the original and final destination, a shipment of grain might be delayed for up to three transits and billed as a continuation of a through-shipment. At the time of the initial billing, the shipment may not have had a final destination.

Out of these various proportional and transit rates came a grain marketing channel that permitted intermediate storage, blending, milling, reconsignment, diversion, and circuitous routing. These became marketing tools for grain middlemen.

Trucks and railroads, not as strictly regulated, cut into railroad profits

By 1935, truck transportation had grown substantially, and more highways were being paved. The Motor Carrier Act was passed and later became Part II of the Interstate Commerce Act. It exempts motor trucks from economic regulation when transporting unmanufactured agricultural products. Thus, for-hire trucks transporting grain interstate are not subject to economic regulation by the Interstate Commerce Commission.

Barge traffic was also increasing at the same time. The Transportation Act of 1940 became Part III of the Interstate Commerce Act, and brought inland waterway transportation under regulation of the ICC.

Part III contained a "grandfather clause" which exempts inland water carriers from economic regulation when transporting three or fewer bulk commodities in one tow, provided such commodities were transported in bulk prior to June 1, 1939. The provision was further amended in 1973 to apply to any number of bulk commodities transported prior to June 1, 1939.

The railroads were fully utilized during World War II, maintenance was minimal, and trackage and equipment was literally worn out. Because they needed money for rebuilding, the railroads applied for several rate increases, which were approved. From 1946 through 1958 the ICC authorized eight general increases in rail freight rates. As a result, freight rates reached a cumulative total of almost 100 percent above the 1945 level.

But to shippers, the money didn't seem to be filtering down to tracks and rolling stock. They were dissatisfied with poor equipment and service, and many turned to trucks.

Exempt for-hire trucks, itinerant grain merchants, and privately-owned trucks operated by manufacturing and merchandising firms quickly responded. Truck shipments of commercial grain

from Illinois, Indiana, and Ohio increased from 21 percent of country elevator shipments in 1954 to 35 percent in 1958.

Truck and barge transportation in combination became an even stronger competitor of the railroads as they absorbed more of the long-haul traffic, often bypassing the major grain terminals and storage and milling centers. From Kansas City, wheat shipments by barge increased from about 12 million bushels in 1960 to over 38 million in 1964.

TABLE 1 - RAILROAD FREIGHT RATE INDEXES

FOR WHEAT AND ALL GRAINS,

1957-741/ (1967=100)

	orivileses.	i dianate transit :
Year	Wheat	All Grains
1957	119	116 wolf
1958	122	120
1959	120	asiar 116 bluow 1
1960	119	assas 115 med
1961	119	t ents:114 teos a
1962	200 N 201116 03-3ml	tog bee 1130 regge
1963	114	111 Junear Lt
1964	111	108
1965	temporal ed 99 mil an	101
1966	99 11111	droganilo
1967	100	100 100 100 100 100 100 100 100 100 100
1968	101	100
1969	102	100
1970	113	109
1971	125	121 941
1972	120	your 1 121 to man a
1973	124	at at a 122 and bo
1974	147	146

<sup>1/</sup>All indexes are of the weighted aggregate type and are based upon averages of rates in effect during the year. Annual averages are computed by weighting rates by the number of days they are in effect.

SOURCE: 20 MTS--195, August, 1975.

and increased maintenance and labor expenses resulted in many railroads incurring either losses or substantially reduced earnings. Rate increases were requested by the railroads, and average rates for transporting wheat increased 47 percent between 1967 and 1974 (Table 1).

Even with increased rates and the adoption of improved technology, many railroads still struggle to remain financially solvent. One way to cut costs, they figure, is to abandon light density, unprofitable rail trackage.

Rates have not always reflected actual costs of transporting wheat

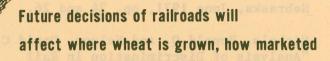
Railroads have tended to set their rates: (1) to reflect the value of the commodity rather than the actual costs of transporting the commodity, or (2) in accordance with competitors' costs rather than their own.

Research studies of railroad rate setting have generally focused on relationships between railroad revenue to out-of-pocket costs. Wheat was found to have a revenue to out-of-pocket cost ratio of 1.85 and contributed more to overhead (\$120 million) rail costs than any other commodity in 1961.[1] A 1966 analysis found that weighted average revenue to out-of-pocket cost ratio for all territories of the United States was 1.9.[2] A 1969-70 rail study showed similar results for the states of North Dakota, Montana, South Dakota and Minnesota.[3]

Producers against whom geographic discrimination is practiced either have to accept lower product prices and/or find alternative means to transport their products. Wheat producers have spoken up about rates in the past. However, new studies are needed to see if improvements have been made.

on mainline railroads have replaced many smaller country elevators on the light branch lines.

These shifts were necessary because of the poor condition of the branch lines serving many country points. In some cases, the branch lines did not generate sufficient traffic to warrant expenditures to maintain them. In other cases, the railroads were nearly insolvent. From the point of view of the railroad companies, the revenue from many such branch lines will never meet costs and in the long run will merely be a profitless burden unless disposed of.



What's to happen to grain elevators located on these lines? Can they use more truck transportation? That depends, in part, on the condition of local highways. Can the elevators compete with larger establishments on main rail lines? Should they become feeders for larger elevators on the mainlines? Or should they switch to an alternative use?

When the answers come, they will alter what wheat producers do. They may have to transport wheat a greater distance to a subterminal elevator. That involves time, labor, and expense. However, if larger elevators, unit trains and multi-car shipments are indeed more efficient and if they can be fitted into the wheat marketing system, then wheat farmers may be in a more profitable position as a result of these changes. The ultimate changes the railroads make will determine in part where wheat will be grown, the allocation of resources within the grain transportation and marketing system, and the choice of marketing alternatives which producers can utilize.

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