Papers and Proceedings of the Trucking in North Dakota Management Conference

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PAPERS AND PROCEEDINGS OF THE TRUCKING IN NORTH DAKOTA MANAGEMENT CONFERENCE

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INTRODUCTION

For years the so-called exempt trucker has been regarded as fly-by-night operators and unreliable but yet the independent trucker has also been romanticized in movies, music, etc. There are anywhere from 150,000 to 200,000 exempt truckers operating in the United States. It is estimated that from 600 to over 1000 serve North Dakota. In North Dakota, these truckers comprise an integral element in the marketing of North Dakota's agricultural products. In addition to providing transportation of 30 to 40 percent of the grain and oil-seed movement, they also serve the purpose of acting as a source of competition for the railroads which serve the agricultural producer of the state. In the last few years there have been a number of developments affecting the transportation industry e.g., deregulation, rising fuel and capital costs, etc. The exempt trucker, in many cases, has neither the expertise, the capabilities nor the resources to keep abreast of these developments. Thus, the general objective of this conference is to provide exempt truckers with information and tools which are necessary for a manager to make informed managerial decisions.

The papers which follow represent five aspects of North Dakota trucking. The first provides a description of the exempt truckers now serving the state of North Dakota, a methodology from which costs may be developed and used in the management process, as well as a discussion of certain operational aspects of the exempt trucker and

EXEMPT TRUCKING: THE CASE IN NORTH DAKOTA

Wesley W. Wilson*

Introduction

The trucking industry in North Dakota is composed of two sectors--regulated truckers and exempt truckers. This presentation will be slanted toward the exempt sector for several reasons. First, agriculture is North Dakota's most basic industry, and the exempt sector is an integral aspect of the marketing of North Dakota's agricultural products. Second, the regulated sector was partially deregulated and will have a number of potential impacts upon the exempt sector. Third, this sector is and has been particularly hard hit by inflationary pressures and now faces growing competitive pressures due to the development of deregulation of the transportation industry.

The purposes of this presentation are to provide descriptive characteristics of the industry to be used for comparative purposes, to provide a methodology to calculate costs as well as to discuss various operational characteristics which affect costs, and to discuss various techniques of cost-based pricing.

Exempt Truckers in North Dakota

Nature of the Exempt Trucker

Exempt truckers serving the State of North Dakota are composed of several different types of operations. These truckers range from

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their effect upon costs and rates. The second and third papers provide analyses of the Motor Carrier Act of 1980 and the Staggers Rail Act of 1980, both of which have many implications concerning the competitive environment of the exempt trucker. Each of these legislative acts imply both opportunities and losses to the exempt trucker. The exempt trucker knowledgeable of the implications can make certain decisions which could favorably impact his or her firm. The uniformed trucker, clinging to traditional views, may make decisions which adversely affect his or her firm. The fourth study pertains to growth of the movement of exempt agricultural commodities by truck. The analysis encompasses past trends of truck movement of agricultural commodities, the areas in which the exempt trucker is disadvantaged as well as the areas of competitive edge, and provides a discussion of geographical and temporal flexibility of the exempt trucker in view of costs and rail rate changes.

The final paper provides a summary of each independent presentation and integrates them together. In addition, a broad statement regarding the national position of trucking and some of the issues facing these firms is provided. Finally, Dr. Casavant provides a theme for the conference: "Manage, don't just drive!"

farmers hauling their own agricultural products to market--to relatively large trucking firms serving a very large trade area.

Number of Exempt Trucking Firms

Because this particular sector of the trucking industry is exempt from either state or Interstate Commerce Commission (ICC) regulation, it is very difficult to estimate the number of exempt carriers serving the state. In 1978, John Cosgriff, a former research associate at the Upper Great Plains Transportation Institute (UGPTI) placed an estimate of the number of firms as being between 600 and 1000 firms. Currently, this estimate of truckers remains virtually unchanged. During the summer of 1980 the UGPTI conducted a survey of exempt truckers in North Dakota. About 750 surveys were sent out to all truckers listed in the UGPTI publication "Grain Trucking Directory 1980" supplemented with an additional list provided by the North Dakota Public Service Commission (PSC), the final list included all exempt truckers known to serve the state. About 50 surveys were returned out-of-business or address unknown reducing the number of exempt truckers handling agricultural products to about 700.

There are two dominant railroads that serve the state of North Dakota and they have transported an average of about 67 percent of the total grain and oilseed movements out of North Dakota over the last five years. The remaining 33 percent was split among that 700 truckers. It could be inferred from this information alone that the exempt sector trucking industry is very fragmented and unorgan-

ized compared to railroads. However, since the trucking industry is characterized by relatively low barriers to entry, these truckers also serve a function of being a competitive barrier between the North Dakota agricultural producer and the railroads.

Geographical Distribution of Trucking Firms in North Dakota

There are 662 truckers listed in the UGPTI publication "Grain Trucking Directory 1980". Of the 662, 77 percent have mailing addresses in North Dakota (see Table 1). Generally, most grain-hauling trucking firms are located in eastern North Dakota. Of the nine Crop Reporting Districts (CRD) in North Dakota, (see Figure 1) CRD-3 in the northeast has the greatest number of trucking firms located there, numbering 109 firms. CRD-4 in the west-central part of the state has the smallest number of truckers, numbering only 24. This is explainable by the fact that the eastern part of the state is also a larger producing region than is the western region. It would normally be expected that concentrations of trucking firms would be located in the large producing regions.

TABLE 1.--GEOGRAPHICAL DISTRIBUTION OF TRUCKING FIRMS SERVING NORTH DAKOTA.

State	Number of Truckers	%
North Dakota	511	77
Minnesota	110	17
South Dakota	17	3
Montana	21	3
Other	3	-
Total	662	100%

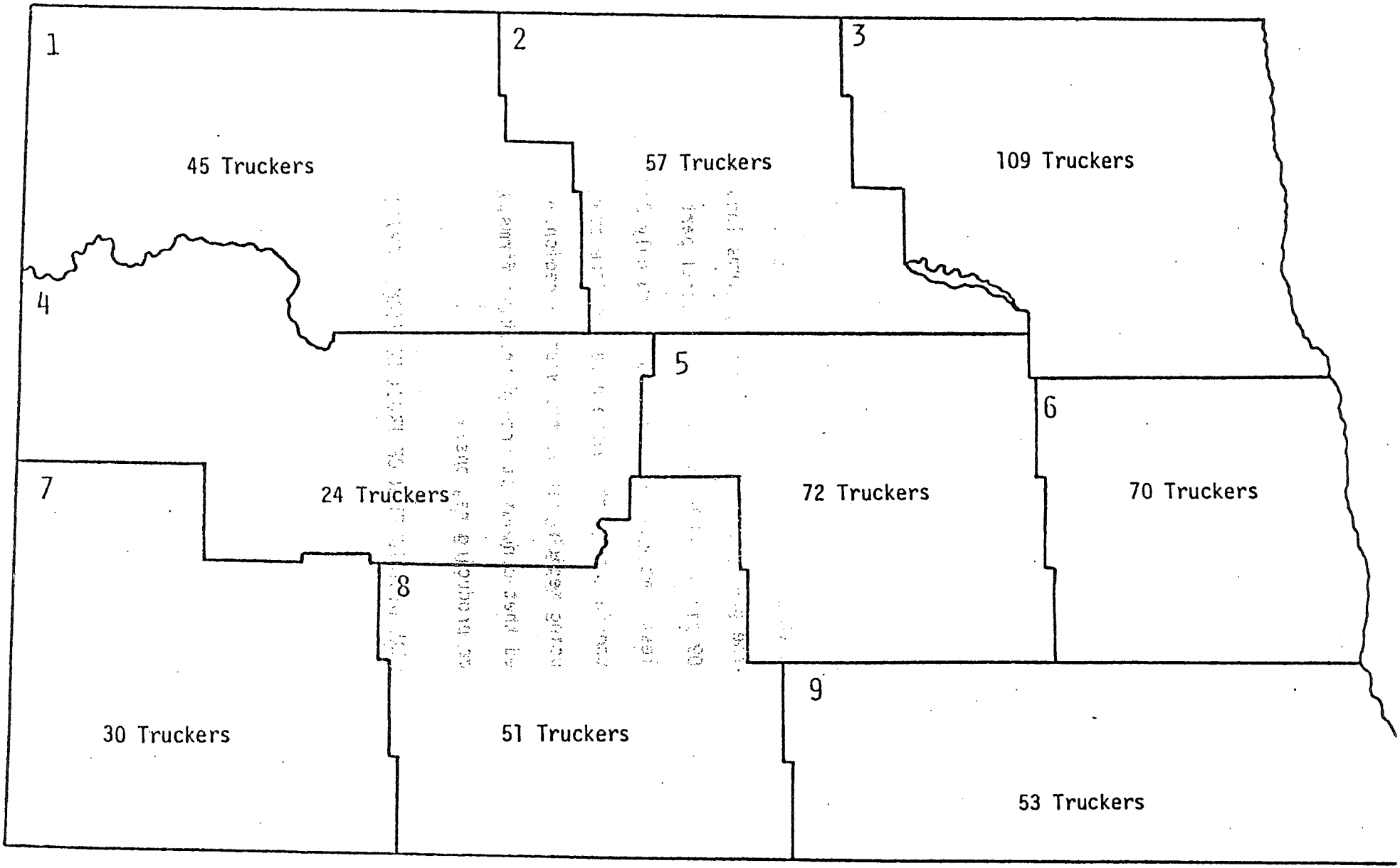


Figure 1.--Number of Truckers Located in Each Crop Reporting District of North Dakota.

The Relative Market Share of Truckers

Figure 2 contains the relative truck and rail share of grain movements out of the state of North Dakota over the six year time span from the 1974-75 crop year to the 1979-80 crop year. Historically, the northwestern part of the state (CRD's 1, 2 and 4) has been captive to the railroad. For every year under study the railroads have captured over 70 percent of the market. CRDs 3, 5, 6, 7 and 8 have been growth areas in the state for truckers. In the largest growth area, CRD-6, trucks provided only 28 percent of grain transportation in the 1974-75 crop year growing to over 50 percent in the 1978-79 crop year.

Industry Characteristics

Size of Trucking Firms

There are several methods of analyzing the degree of intramodal competition (competition between firms of the same mode). Table 2 stratifies the trucking firms comprising this analysis into three different size categories by number of tractors operated by each firm.

TABLE 2.--CLASSIFICATION OF SAMPLE - BY FIRM SIZE.

Category	No. of Firms	Percentage
Total	75	100%
Owner-Operators (1 tractor)	28	37
Medium (2-4 tractors)	37	49
Large (5 or more tractors)	10	13
Average Number of Tractors	3.2	NA

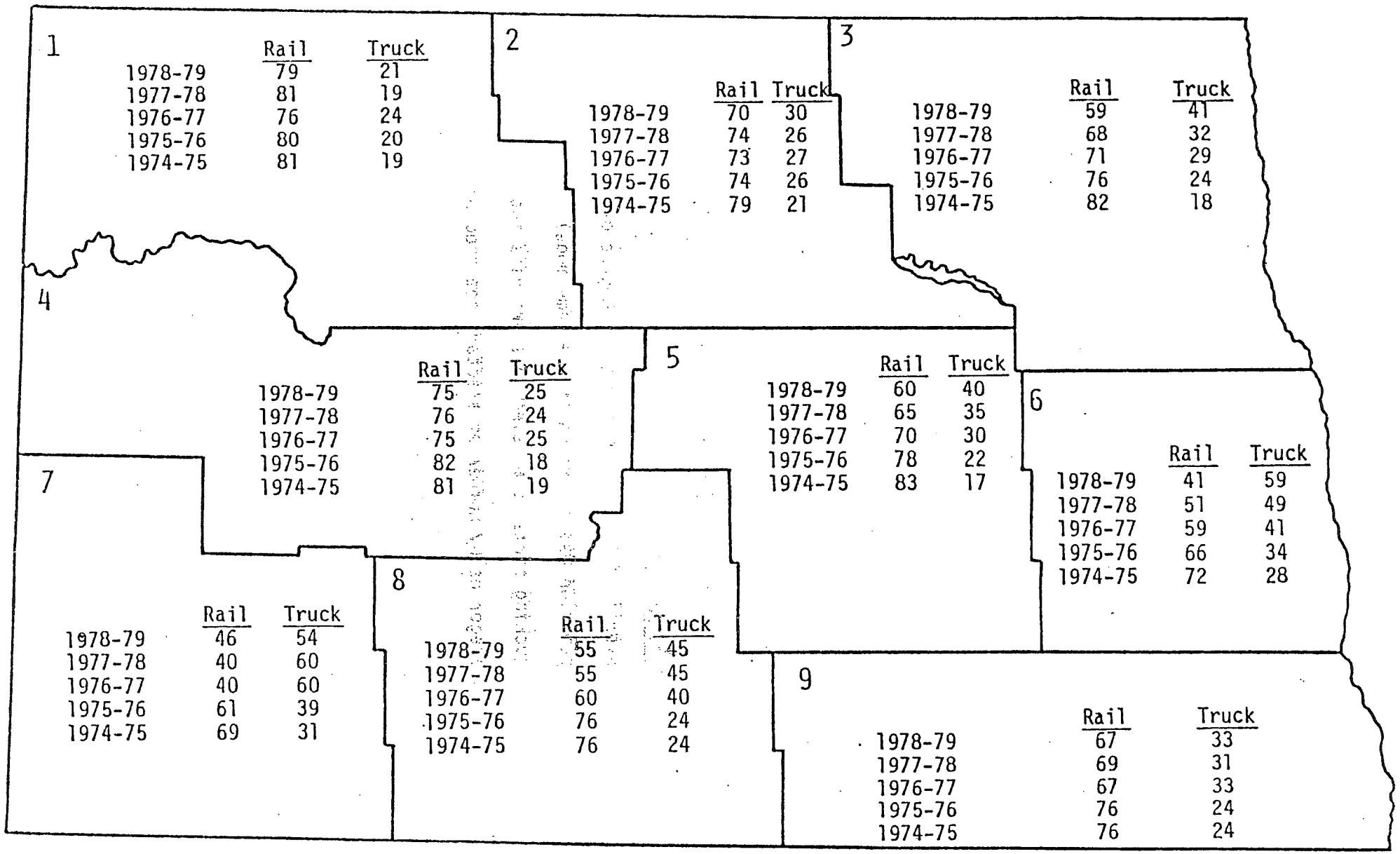


Figure 2.--Grain and Oilseed Modal Split for Crop Years 1974-75 to 1978-79.

Medium-sized firms (2-4 tractors) comprise the largest category with 37 respondents. Owner-operators with 28 and large firms (5 or more tractors) with only 10 respondents. However, as shown in Table 3 the large firm size category is about four times larger than is the medium size firm and about thirteen times larger than the average owner-operator firm (measured in terms of per firm miles).

In addition, larger firms generally utilized their equipment to a greater degree than did the other two categories. Utilization of equipment tends to increase with firm size. Intuitively, a greater utilization of equipment would be expected to have a negative effect on costs. Thus, larger firms would be expected to have a cost advantage over smaller firms.

TABLE 3.--AVERAGE YEARLY MILEAGE PER FIRM AND PER VEHICLE-PER FIRM SIZE CATEGORIES.

Size	Average Per-Vehicle Miles	Average Per-Firm Miles
Total	88,188 miles	298,926 miles
Owner-Operators	87,379 "	87,379 "
Medium	88,261 "	234,347 "
Large	90,180 "	1,130,200 "

The degree of intramodal competition may also be analyzed through the relative market share of firms in the industry. In this study it was found that the large firm-size category captured about 60 percent of the market, measured in terms of the percentage of industry loaded miles (Table 4). The largest firm captured about 15 percent of the market (Table 5). The largest four captured about 40 percent of the

market, and the largest eight controlled about 57 percent of the market (Table 5).

TABLE 4.--CONCENTRATION - PERCENTAGE OF LOADED MILES BY FIRM SIZE.

Size	Loaded Miles	Percentage
Total	16,417,463	100%
Owner-Operators	1,501,804	9.2
Medium	5,451,909	33.2
Large	9,463,750	57.6

TABLE 5.--CONCENTRATION - PERCENTAGE OF LOADED MILES BY EXEMPT MOTOR CARRIERS.

# of Carriers	Loaded Miles	Percentage
Total	16,417,463	100%
Largest	2,500,000	15.2
Largest Four	6,480,000	39.5
Largest Eight	9,317,750	56.8
Largest Twenty	11,699,169	17.3

In many industries the largest firm controlling 15 percent of the market would be highly suspect by anti-trust agencies. However, it should be noted that two railroads have captured an average of about 65 percent of the North Dakota market over the six year time frame of the study.

Length of Time in Business

Owner-operators and medium-sized firms have similar statistics with regard to length of time in business (see Table 6). In compari-

son to larger firms the owner-operators and medium-sized firms then to be much "younger" than the larger firms. Larger firms comprising this analysis have all been in business 5 or more years, and 80 percent of the firms have been in business 10 or more years. They average a length of time in business of about 13 years. In contrast, smaller firms average only about 8 years in business. It appears from these statistics that larger firms tend to be much more stable than do smaller firms. In addition, the long suspected view that small truck operations are marginal operators appears to have some credence as demonstrated by these figures. There are exceptions but there must be a competitive advantage of being a large trucking firm as opposed to a smaller firm.

TABLE 6.--LENGTH OF TIME IN BUSINESS BY FIRM SIZE.

Years	All Operators	Medium (2-4 Tractors)	Large (5 or More Tractors
Five or more	78% 71%	78%	100%
Ten or more	34 25	28	80
Fifteen or more	12 7	8	40
Twenty or more	8 4	6	30
Average	8½ yrs. 7½ yrs.	8 yrs.	13½ yrs.

Average Length of Haul

Average length of hauls can be analyzed from two points of view--a marketing viewpoint and a cost viewpoint. Greater lengths of hauls will broaden truckers visability, attract more customers, and more backhauls. From a cost standpoint greater lengths of haul would be

expected to have a decreasing effect on cost. As shown in Table 7 average haul figures increase with firm size. Average length of haul figures are about 200 miles further for large firms as opposed to the other firm size categories. It could be expected that larger firms attract a greater number of loads and provide transportation more efficiently.

TABLE 7.--AVERAGE LENGTH OF HAUL - BY FIRM SIZE.

Firm Size	Average Length of Haul
Total	478
Owner-Operators	434
Medium	469
Large	635

Backhauls

Market economies of size appear to be prevalent in this industry. Almost sixty percent of return movements of larger truckers are loaded while smaller firms have only about 25 percent of return movements loaded (Table 8). This may be due to several factors. For example, the comparatively large trade area served could explain part of it but also large firms are substantially larger and have been in business much longer. It's possible these firms have built up return movements with shippers over an extended period of time and have comparatively stable trade routes.

It has been frequently stated that instability in the trucking industry stems from an inadequate knowledge of costs and pricing. The next two sections of this presentation provide an analysis of

costs, a method for calculating costs, and an explanation of cost based pricing.

TABLE 8.--PERCENTAGES OF TOTAL MILES TRAVELLED LOADED AND UNLOADED AND PERCENTAGE OF RETURN TRIP LOADED.

Size Category	Percentage of Return Trip Loaded
Total Sample	29
Owner-Operators	24
Medium	25
Large	59

It has been frequently stated that instability in the trucking industry stems from an inadequate knowledge of costs and pricing. The next two sections of this presentation provide an analysis of costs, a method for calculating costs, and an explanation of cost based pricing.

Cost Relationships

A statistical methodology called ordinary least squares regression allows testing of certain factors and their relationships to cost. For these purposes, data from 75 exempt truckers serving the state of North Dakota were used.* The relationship of cost to output (yearly miles), size of firm (number of employees), utilization of equipment (miles per tractor), average length of haul and age of equipment were tested. Table 9 contains the expected and observed relationships of these variables to cost.

*Data from these truckers were the result of the survey described earlier.

TABLE 9.--EXPECTED AND OBSERVED RELATIONSHIPS TO PER UNIT COST.

Variable	Expected Effect	Observed Effect
Output	-	-
Firm size (number of employees)	+	+
Utilization (miles per tractor)	-	-
Average length of haul	-	-
Age of Equipment	-	-

The estimating equation yielded estimated per-mile costs as shown in Table 10. As expected, per unit costs decrease with firm size (measured by the number of tractors). These costs are stated in terms of December 1980 costs. For pricing and ratemaking decisions this method of calculating costs is deficient in many respects. First, they are estimates and a particular firm may be able to calculate more efficient estimates more closely attuned to their own operations. Second, this method of costing is very expensive, time consuming, and complicated. Third, these estimates are static meaning they are estimates of cost at time period (December of 1980). While they may be updated for inflation through a variety of methods a loss of efficiency would certainly be experienced. For these reasons, the subsequent worksheets is provided.

TABLE 10.--AVERAGE COSTS PER MILE.

Dependent Variable	Total Survey	Owner-Operator	Medium	Large
ATC	91.05	94.30	91.86	89.89

Costing Worksheet

A. Tractor Depreciation:

1. Average Cost Per Tractor				
2. Number of Tractors	x		=	
3. Depreciable Increment of Cost			x	.70
4. Depreciable Portion of Cost			=	
5. Estimated Useful Life (Years)			÷	4
6. Annual Depreciation of Tractor Fleet			=	

B. Trailer Depreciation:

1. Average Cost Per Trailer				
2. Number of Trailers	x		=	
3. Depreciable Increment of Cost			x	.75
4. Depreciable Portion of Cost			=	
5. Estimated Useful Life (Years)			+	6
6. Annual Depreciation of Trailer Fleet			=	

C. Tire Cost:

1. Cost Per Tire				
2. Number of Tires Used Yearly			x	
3. Annual Tire Cost			=	

D. Driver Wage Cost:

1. Average Salary (Wage) Paid				
2. Number of Drivers			x	
3. Annual Drivers Cost			=	

E. Fuel Costs:

1. Average Price Per Gallon of Fuel				
2. Miles Per Gallon of Fuel			+	
3. Fuel Cost Per Mile			=	
4. Average Yearly Miles			x	
5. Annual Fuel Cost				

F. Maintenance Costs:

1. Average Cost Per Quart of Oil				
2. Number of Quarts Used (per year)	x			
3. Annual Oil Cost	=			
4. Cost Per Pound of Grease				
5. Number of Pounds Used (per year)	x			
6. Annual Grease Cost	=			
7. Annual Repair Expenditures				
8. Other Maintenance Costs				
9. Total Annual Maintenance Costs (F73, F76, F77, F78)				

Costing Worksheet - continued

I. Insurance Expense _____

J. Terminal Costs _____

1.	Cost of Storage Building			
2.	Percentage Used for Truck Operations	x		
3.	Cost of Truck Portions	=		
4.	Depreciable Increment Percentage	x		
5.	Depreciable Cost	=		
6.	Estimated Useful Life (years)	÷		
7.	Annual Depreciation			=
8.	Rent Per Month			
9.	Number of Months	x		
10.	Yearly Rate Expenditures	=		
11.	Annual Taxes on Storage Building			
12.	Annual Insurance on Building	+		
13.	Annual Licensing Fees	+		
14.	Percentage Use for Truck Operations	x		
15.	Yearly Taxes & Licenses on Truck	+		
16.	Total Operations Cost	=		
17.	Cost of Garage Equipment			
18.	Estimated Useful Life	+		
19.	Annual Depreciation of Garage Equip.	=		
20.	Annual Utility Costs			
21.	Management Salaries (Wages)			
22.	Nondriver Labor Costs	+		
23.	Total Annual Other Terminal Costs	=		
24.	Total Terminal Costs (J7,J10,J16, J19,J23)	=		

K. Interest Expense Per Year _____

L. Return on Investment

1.	Equity in Tractor Fleet	$	
2.	Equity in Trailer Fleet	+	
3.	Working Capitol	+	
4.	Storage Building (I5)	+	
5.	Investment		
6.	Rate of Return on Investment	x	.15
7.	Annual Return on Investment		

M. Costs Per Mile

1.	Total Annual Costs (A6,B6,C3,D3,E5, F9,I1,J28,K1,L7)	$	
2.	Average Annual Miles	÷	
3.	Total Cost Per Mile		

Calculating Costs

Nature of Costs

Generally, two cost patterns are observed--fixed costs and variable costs. Fixed costs are those costs that do not vary with output. Variable costs are those costs that do vary with output. However, in truck transportation there are several cost components that do not fit the general definitions of fixed or variable cost. These costs are commonly known as "mixed costs". For managerial decision making it is very important to be able to differentiate among fixed and variable costs as the latter may represent a pricing floor. Because of the degree of mixed costs in motor carrier operations it is very difficult to estimate fixed and variable costs directly. For this reason, it is suggested that average total costs is multiplied by 90 percent to yield variable cost. Ninety percent has been estimated as that portion of total costs which is variable by several people including the author.

What Costs to Use

In an effort to keep up with inflation it is suggested that this worksheet be calculated quarterly using current costs. In other words, every three months the user of this worksheet should recalculate per unit costs using current cost of labor, current price of fuel, current cost of tires, etc. If these calculations are based on historical costs, the estimated costs of operation would be severely understated due to inflationary pressures.

Pricing and Rate-Making Decisions

Backhauls and Pricing

The additional costs of a full load on the return movement as opposed to backhauling empty are not significant. There may be some circuitous miles and some additional waiting time but the costs are generally minimal. The implications of a low marginal cost of backhaul implies that the fronthaul rate may be lessened. For example, if you travel 200 miles one-way at a cost of $1.00 per mile you would need to charge the fronthaul at a rate of $2 per-mile to recoup the $400 cost of the fronthaul and the empty backhaul. If you have a backhaul you could drop the fronthaul rate in one-half and charge the rest on the backhaul. Backhauls allow a trucker a very good method of competitive pricing. Larger truckers in North Dakota (5 tractors or more) have a very substantial advantage in this area. Larger truckers in the survey have a backhaul 60 percent of the time while smaller truckers only about 25 percent. The relative degree competitive advantage of large over small truckers can be demonstrated by using the following formula:

$$TC = R * D + R * D * P$$

TC = Total Cost
R = Rate Per Mile
D = Round Trip Distance
P = Probability of Backhaul

Assuming a round trip distance of 400 miles, a cost of $1.00 per mile, and everything else held constant, a larger trucker with a 60 percent probability of a backhaul could charge 62½ cents to re-

coup their costs. A smaller trucker with the same costs would generally have to charge 80 cents per mile to recoup their costs of the 400 mile trip.

Rate and Pricing

From a managerial perspective, rates and pricing represent one of the most complex aspects of trucking. It appears that truckers play a small role in rate determination (see Table 11). Responses from elevator operators indicate that rates are either negotiated, set by the elevator, or set close to the rail rate.

TABLE 11.--RESPONSE TO "HOW ARE RATES DETERMINED".

Response	Elevator Responses	Truckers
Negotiated	31.8%	18.8%
Set by Commission Firm	8.9	11.1
Set by Truckers	9.6	2.6
Set by Elevators	26.8	50.4
Same or Close to Rail Rate	21.5	14.5
No Opinion	.66	1.7
Other	.66	.85
Total	100%	100%

Source: John G. Cosgriff, "The Cost and Operation of Exempt Motor Carriers in North Dakota", UGPTI Report No. 22, Nov. 1978.

Responses from truckers indicate that rates are either set by the elevator or they are negotiated. The implication of the above analysis suggests that truckers do not have a role in rate determination. However, given this aspect, truckers still have a pricing

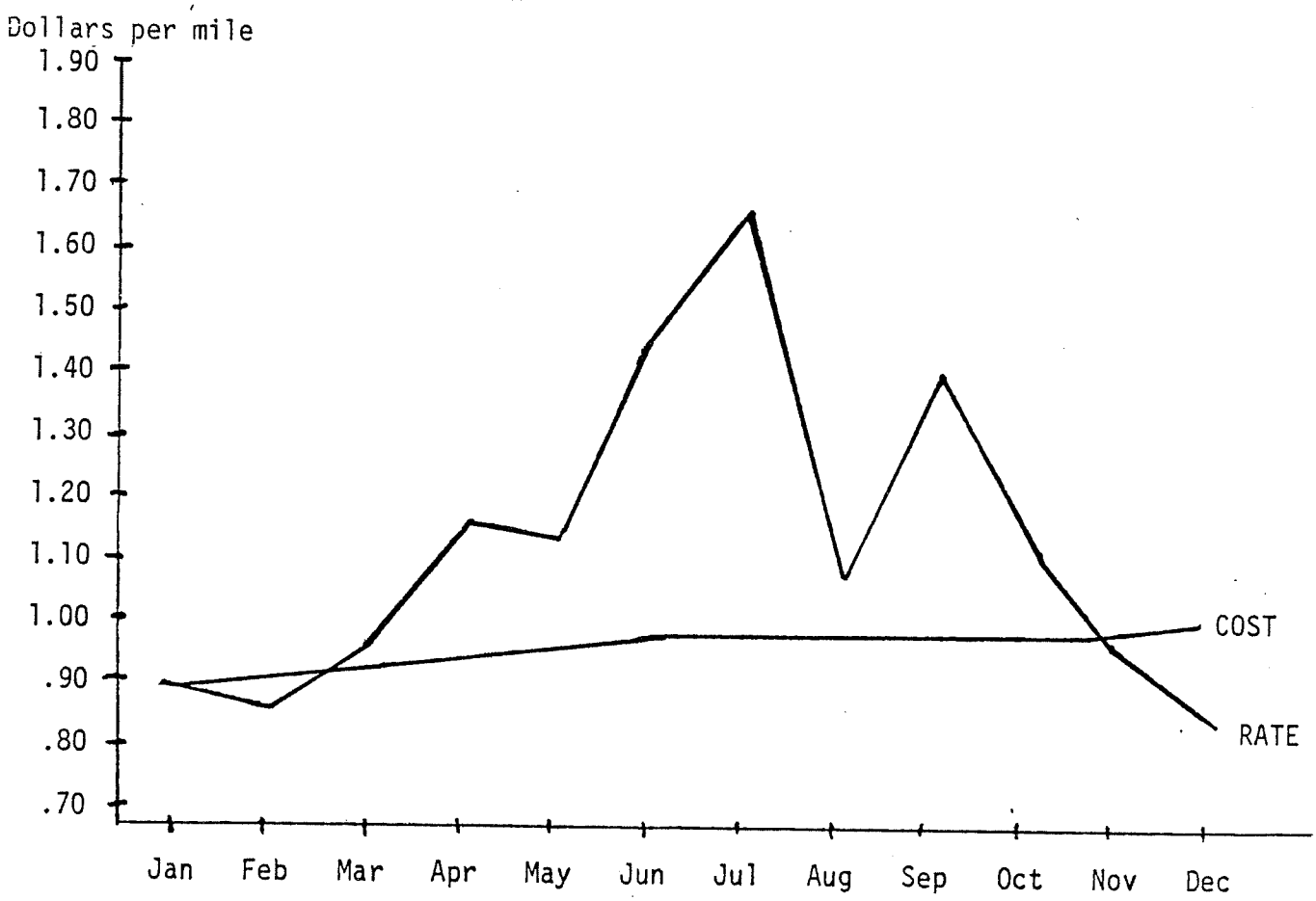
decision. For example, the trucker still has the decision of whether or not to haul at a given rate.

Seasonality of Rates

In the last section it was suggested that trucking firms have a very small role in rate determination. They must accept rates as dictated by the market. Seasonality of rates appears to be prevelent in fruit and vegetable movements. In other words, the rate dictated by the market is adjusted for seasonal demand fluctuations, Truck rates of fruit and vegetable commodities lie substantially above truck costs during peak demand periods and below truck costs during off season periods. The rate to cost relationship depicted in Figure 3 is applicable for long-haul movements of fruit and vegetable commodities. The seasonality of truck rates appears to be significant. However, not applicable to grain movements out of North Dakota.

Seasonality of rates could be expected to exist in North Dakota's trucking industry. Demand relationships exist between transportation services and grain movements. Economic theory would suggest that when grain movements are at a peak the price of transportation services would then be high. Figure 4 contains a graph of grain movements per month, seasonally adjusted over the 12 year time period from the crop year 1967-68 to the crop year 1978-79. The seasonal index is a percentage of the annual monthly average (adjusted for random influences). In other words, if all shipments were equivalent for each month of the year the monthly seasonal index for each month would equal 100 percent. However, uniform amounts of grain are not shipped each month and the

Revenue-Cost Comparison of Fruit and Vegetable Truck Movements
Southern California to New York



Revenue equals midpoint of weekly range taken from Truck Rate Report divided by mileage from a point in Southern California to New York City Cost taken from Truck Cost Report.

Figure 3.--Seasonal Relationships of Rates to Costs

Source: Office of Transportation, USDA

seasonal index will reflect different monthly shipping patterns. It could be expected that truck rates fluctuate with seasonal deviations of grain movements. In August, September and October the demand for transportation of agricultural products is high. During this period,

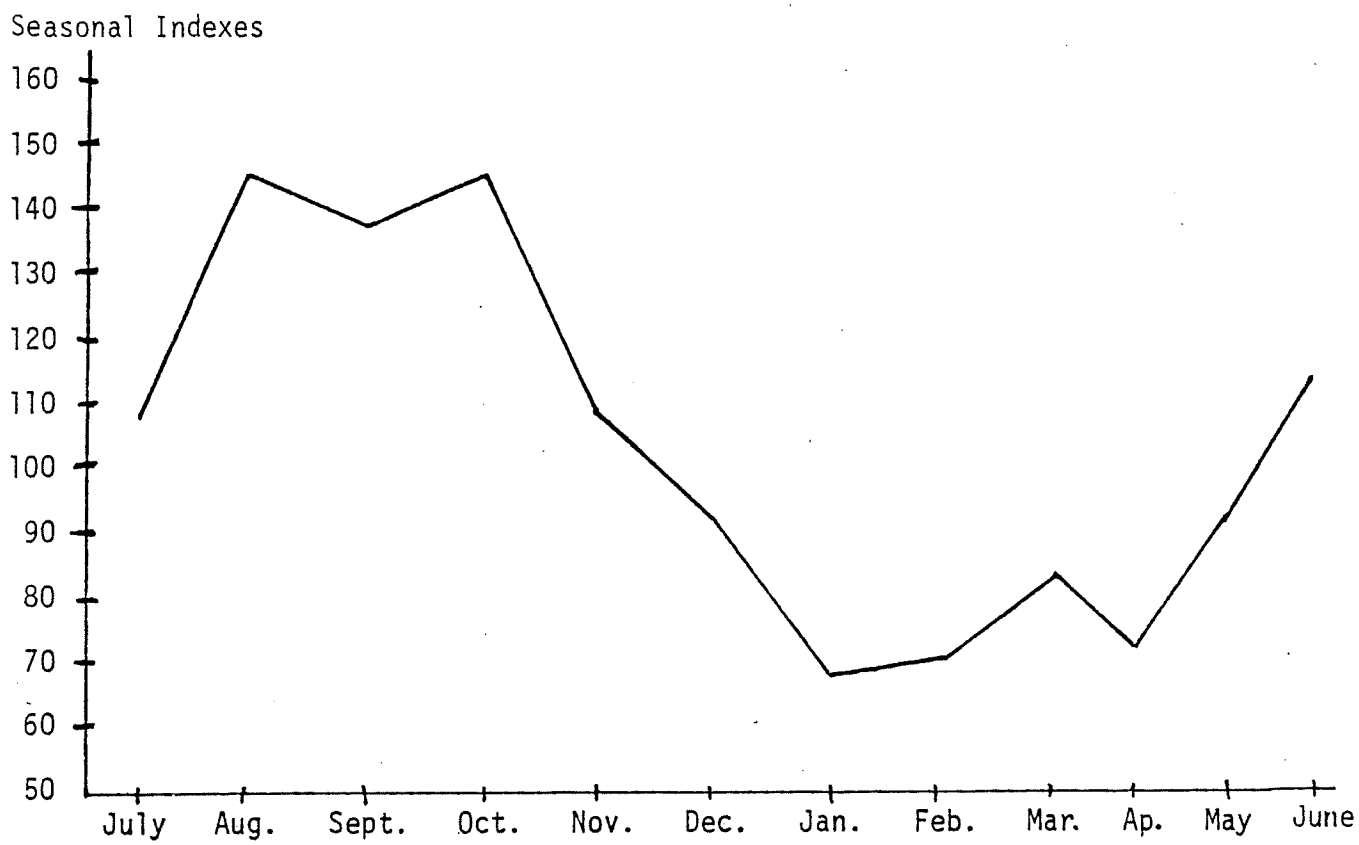


Figure 4.--Average Monthly Seasonal Indexes of Grain Shipments to All Destinations, 1968-69 to 1978-79.

Source: William W. Wilson, and John Crabtree, "Seasonal Behavior of Marketing Patterns for Grain from North Dakota, Agricultural Economics Report No. 143, Upper Great Plains Transportation Institute Report No. 38, March, 1981, NDSU, Fargo, ND.

the value of truck transportation services would also be expected to be high and accordingly the rate. In January and February when movements are low it would be expected that the value of the service would be low and therefore the rate.

It is well recognized that costs are one of the most important considerations of rate related decisions. In the last section a methodology of calculating costs per mile was developed. These costs can be used to develop variable costs per mile and total costs per mile. Each of these costs are important to truckers but in many cases out of the pocket costs may be the most important consideration.

Out of pocket costs are costs that require a cash outlay such as fuel, driver wages, subsistence costs, repairs, etc. A load should not be accepted at any rate below these costs. Variable costs are costs that vary with output. A trucker should generally view this variable cost as his/her pricing floor. In other words, a load should not be accepted below this cost unless for a good reason. For example, a trucker may have an installment payment due and not have the cash resources to pay it. Under this circumstance the trucker may accept a load at a rate below variable cost but still have the out of the pocket cost. It should be stated that over the long-run the average <u>total cost</u> of truck transportation must be recouped for the trucker to remain in business. It has been stated the trucking industry faces similar circumstances to what economists call perfect competition. If this is the case, each trucking firm has no control over the rates they charge meaning each trucker must charge a rate dictated by the market. Seasonal adjustments in rates are dictated by the market. What this means is that the so-called demand curve is flat as it applies to each

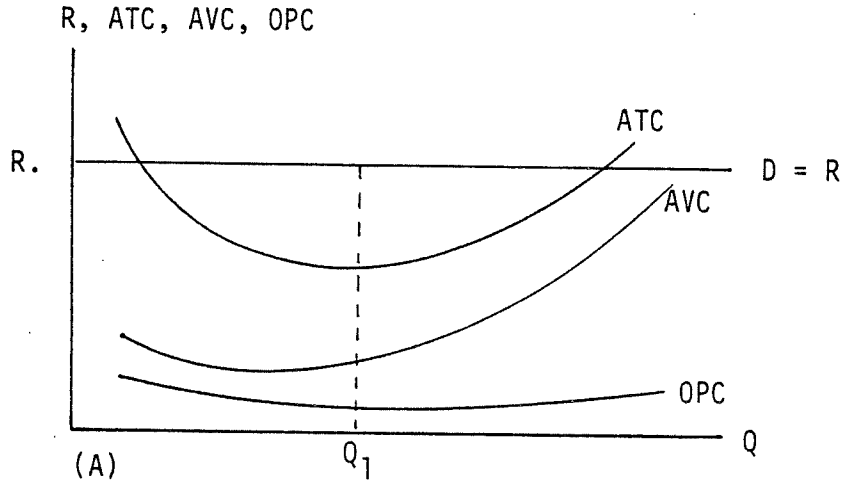
trucking firm. With this in mind three scenarios are provided in Figure 5 each with a different curve.

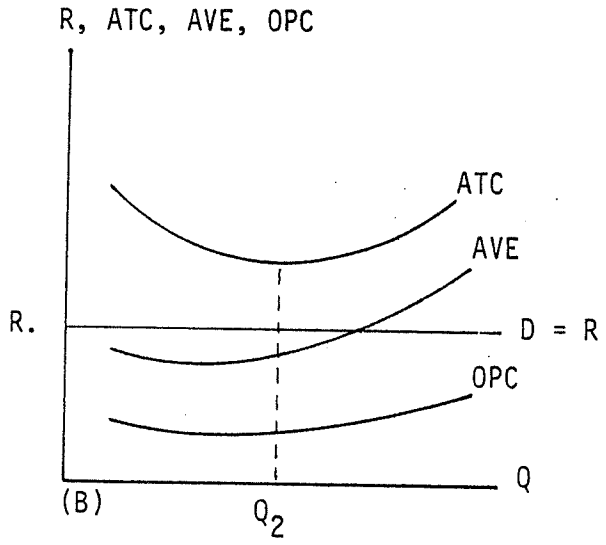
In Figure 5A, R represents a rate which may apply during August, September and October. That rate is substantially above the point of tangency of the ATC curve. The rate cannot apply for a long period of time because new firms would be attracted and eventually drive down the rate. Figure 5B and 5C represent a rate level which may exist during periods of low demand (January and February). A firm cannot survive in the long-run under either situation. If I was a trucker I would probably accept loads over the short-run with a rate as depicted in Figure 5B. However, only under special circumstances would I accept a load under the situation shown in Figure 5C. An example of such a circumstance may be an installment loan payment due.

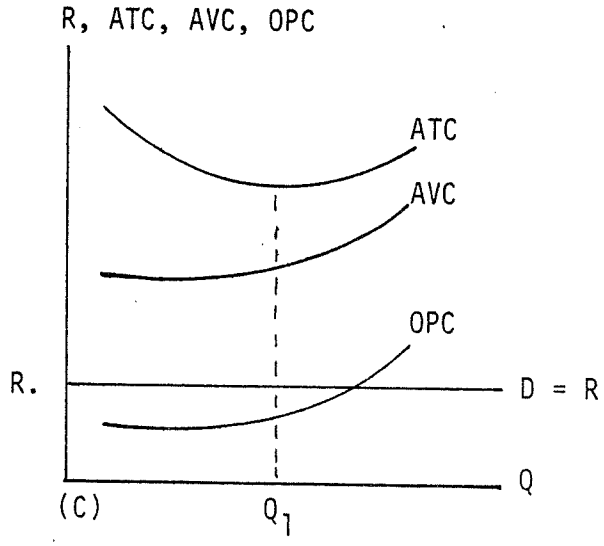
Conclusions

This presentation contained an analysis of the exempt trucking industry serving the State of North Dakota. It appears from the study results that the industry is composed of a large number of small firms dominated by the railroad industry and the larger firms of the trucking industry. The industry appears to be very concentrated--large firms capturing about 60 percent of the market.

The most important finding of the study suggests the economies of scale exist in the exempt trucking industry. Larger firms tend to utilize their equipment to a greater degree, serve a larger trade area, have a longer average haul, have a cost advantage, and have a







R = rate per unit of output
ATC = average total cost per unit of output
AVC = average variable cost per unit of output
OPC = average out of the pocket cost per unit of output

Figure 5. Revenue to Cost Relationships of Trucking.

much greater percentage of return movements loaded. In addition, larger firms have been in business almost twice as long as smaller firms, which may indicate trucking operations on a small scale are in fact marginal.

To be able to compete with larger trucking operations and perhaps the railroad, the smaller firm must achieve a larger backhaul percentage. Subsequent presentations will delve into the mechanics of achieving greater backhaul movements. One of the purposes of this presentation was to demonstrate the effect of backhauls upon the per unit rate truckers must have to exist.

Managers and/or owners of trucking operations must learn to base rate related decisions upon costs. To this end a costing worksheet was provided in this presentation. The importance of cost in such rate related decisions is imperative to the long-run livelihood of the "exempt trucking" as it is known today.

ROLLIN' ON . . . TO DEREGULATION

THE MOTOR CARRIER ACT OF 1980 AND ITS EFFECTS

William E. Thoms, J.S.D.*

Origins of Motor Carrier Regulation

Up until 1925, motor carriers, if they were regulated, were totally under state control (very much like the provincial situation in Canada). Carriers operating in different states had to obtain authority from each jurisdiction through which they passed (they still must obtain license plates today).

All this changed with the decision of the Supreme Court in Buck v. Kuykendall.[1] This proceeding involved a motor carrier who applied to the state of Washington for authority to operate between Seattle and Portland. The application was denied, with Washington's regulatory commission stating that there was already adequate rail and highway service between the two cities.

The Supreme Court, on appeal, held that such a denial was beyond the authority of the State of Washington. Inasmuch as the trucks crossed the Columbia River into Oregon, they were operating in interstate commerce. Constitutionally, a state could not forbid, limit or prohibit competition in interstate commerce. (At the time, the state of Oregon was willing to grant Buck authority to operate in that state.)

The effect of Buck v. Kuykendall was to wipe out state controls on entry for motor carriers and to confine regulation by states of

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[1]297 U.S. 307 (1925).

interstate service to historic police power areas of motor vehicle safety and highway conservation.[2] At the time of Buck v. Kuykendall, some forty states required operators of trucks to obtain certificates of public convenience and necessity, regardless of whether they operated in interstate or intrastate commerce. The Buck decision impelled efforts to seek a federal solution to the problem of the regulation of interstate motor carriage. The Interstate Commerce Commission already exerted plenary powers over the operations of railroads. It was logical that Congress should look to that body for the expertise necessary to regulate this new form of transportation.

Enactment of the Motor Carrier Act of 1935[3] more than doubled the jurisdiction of the Interstate Commerce Commission and changed its focus from a railroad agency to one concerned with all surface transportation.[4] As an umbrella agency, the Commission was charged with protecting not only the public but the economic existence of rail, motor and water carriers. Private carriers were exempted from regulation; anyone might haul his own goods in his own trucks. Agriculture was specifically exempted by law, as was local and occasional transportation. Otherwise, the interstate motor carrier industry was subject to strict controls on entry and rates.

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[2]Webb, Legislative and Regulatory History of Entry Controls on Motor Carriers of Passengers, 8 Transp. L. J. 91, 93-94.

[3]Publ. L. No. 255, 49 Stat. 543 (1935).

[4]Dempsey, Entry Control Under the Interstate Commerce Act, 13 Wake Forest L. Rev. 720, 735 (1977).

Those individuals and firms lucky enough to be operating trucks on the highways at the time of enactment of the Motor Carrier Act were grandfathered into certificates and protected from furhter competition. Otherwise, carriers would have to run the gauntlet of ICC procedures in order to obtain authority that would allow them to haul for hire. Trucks and busses were considered under the same regulatory scheme, and a similar regime was adopted for entry of air carriers, in the Federal Aviation Act of 1938.[5]

Under the scheme of the Motor Carrier Act, the typical application involves an applicant who either wants to get into the motor carrier business or to expand present operations. The application is made to the Interstate Commerce Commission, with supporting statements from shippers who say they would use his service if authority was granted. The application is detailed as to what commodities are to be handled and over which routes. Usually, the application is protested by existing common carriers who fear diversion of traffic. Sometimes the application is amended after conference with protestants to limit the authority sought. In these cases, the protestant may withdraw his opposition. Even in the absence of opposition, however, the carrier must establish a prima facie case of the need for proposed operations.[6] Protestants must demonstrate their operating authority and their willingness and ability to handle the shipper's traffic. The applicant may, in turn, show that population or busi-

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[5]Act of August 23, 1958, 72 Stat. 731, 49 U.S.C. 1301.

[6]Road Runner Trucking, Inc. Extension--Meat, 124 M.C.C. 245, 248 (1976).

ness along the route has increased to the extent that there is enough business for the newcomer as well as existing carriers.[7]

In addition to the public need for the service, the Commission looks at the services of existing carriers. The Commission has imposed an affirmative duty on shippers to inform themselves about which carriers serve their routes before they seek additional motor carriers. But when a carrier proposes a unique type of transportation service which existing carriers do not or will not offer, the ICC often concludes that the public should have the benefits of the new service, even if it might divert traffic from existing carriers.[8] But the rule at the ICC has been to allow existing carriers to handle the traffic which is within their territory.

Pressures for Deregulation of Trucking

Deregulation has been a constant factor in the trucking industry in the areas of transportation exempt from regulation. These include such concepts as agriculture, commercial zones, and transportation incident to air. The industry has had some experience with free markets, as distinguished from the totally regulated railroad environment.

By 1978, Americans had another example of deregulation. The Air Freight Deregulation Act[9] and the Airline Deregulation Act[10]

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[7] Dempsey, supra at 738.

[8] Id. at 740. See Kroblin Refrig. Xpress, Inc., Extension--Morrow, 125 M.C.C. 354 (1976).

[9] Pub. L. No. 95-163, 91 Stat. 1278 (1977).

[10] Pub. L. No. 95-504, amending 49 U.S.C. 1301 ff. (1980).

had been passed, thus creating a sunset law for the CAB. Although there have been many adverse effects on price and service since the passage of these laws,[11] there were enough one-shot benefits with innovative fares by airlines entering new markets to make the idea of deregulation palatable to customers. If air deregulation could bring us Super Saver fares and Freddie Laker, deregulation of surface transportation could only be better. At least, it no longer seemed the end of the world when an individual transportation company went belly-up.

But one of the big factors motivating deregulation was the activity of the ICC itself. Its unimaginative utility-type regulation had caused excessive fragmentation of authority and Talmudic disputes over the nature of commodities to be hauled. With regard to the latter, Representative Millicent Fenwick testified:

> The ICC has 36 categories of exempt and nonexempt products listed under the heading of "Milk and Cream". Buttermilk is exempt, but butterfat and buttermilk with condensed cream are regulated. Concentrated skim milk, and powdered, are exempt, but condensed and evaporated are not.
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> And believe it or not, Mr. Chairman, manure in its natural state is an exempt commodity but manure, fermented with additives such as yeast and molds, producing a rich liquor which in water solution is used for soil enrichment is not.[12]

Restrictions on routes and backhauls seemed an anomaly at a time when fuel shortages abounded and Americans were being told to save

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[11] Dempsey, The Rise and Fall of the Civil Aeronautics Board, 11 Transp. L. J. 91, 171 (1979).

[12] Dempsey, The Expanse of Deregulation: Erosion of the Common Carrier System, 1980 Transportation Law Institute 1, 25.

gasoline. The ICC at one point allowed gateways to be eliminated and shorter routes taken by truckers, so long as they didn't shorten the mileage too much, so as to upset the competitive balance.

Finally, the idea of competition and the elimination of cartels had great appeal. In areas where there was considerable competition, such as in data processing equipment, telecommunications and even auto rentals, customers had seen the advantages of competition in the marketplace. Where the market was imperfect, the public saw administered pricing and oligopolistic behavior. The old conservative cry of freedom to operate without restraint had never been overly popular; most people do not have much property or business of their own and such liberty was meaningless. But the neo-conservative philosophy that competition serves the public and that government has a penchant for lousing things up struck a responsive chord, and brought on a new willingness to let competition play a part in the regulation of transportation.

Exempt Trucking and the Law

A. Agricultural Trucking. Farmers are one of the greatest users of trucks for hauling their commodities. With grain, the haul is usually to the nearest elevator, while with many so called "truck garden" crops, the haul is to the marketplace by trucks. Farm vehicles were intended to remain in an unregulated state and Section 10526(a) (4) of the Interstate Commerce Act exempts from economic regulation motor vehicles owned and controlled by a farmer transporting his own agricultural products and supplies.[13]

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[13] 49 U.S.C. 10256(a) (4) (1978).

Besides the exemption for farm trucks, agricultural products themselves have been always excluded from the regulatory scheme, no matter who hauls them. No one needs a certificate of public convenience and necessity to haul unprocessed agricultural and horticultural commodities.[14] The ICC has spent a lot of time and effort in determining what commodities come within the intention of Congress to exempt only those agricultural products which are in their raw state or, if not generally marketable in their raw state, have been processed solely for the purpose of making them marketable.[15] Truckers, then, could carry these raw agricultural products to market, but the law did not allow a backhual of a nonexempt product.

Much of the hauling of agricultural products is done by agricultural cooperatives. The larger co-ops have transportation divisions and they function very much as the large interstate truckers. The law allowed co-ops to haul up to 15% of their interstate shipments in non-exempt commodities. Agricultrual co-ops, then, seeking a backhaul, would often undercut regular truckers in soliciting business to fill up the empty trailer for gas money. The Motor Carrier Act of 1980 expanded this nonexempt traffic to 25% of the agricultural co-op's tonnage.[16] During the 1970s, the ICC worried a good deal about the problem of "bogus co-ops", so-called agricultural cooperative organizations that engaged in a few marketing activities, but merely sought a backdoor entry into the transportation business.

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[14] 49 U.S.C. 10256(a) (6) (1978).

[15] Dempsey, The Expanse of Deregulation: Erosion of the Common Carrier System, 1980 Transportation Law Institute 1, 24.

[16] Id. at 26.

B. Private Carriage. While driving on the interstate highways, the motorist will notice large semi-trailer trucks marked for retail stores like Sears, K-Mart, Target, etc. All these are firms which have decided to forgo for-hire carriage and establish their own trucking division to connect their farflung stores together. Of the 24.5 million trucks on the highways in 1975, all but a million were operated by private concerns as by trucking firms.[17] When a shipper operates his own vehicles in pursuit of his own (nontransportation) business, it is clearly as much private carriage as when you or I take our packages home from the department store. The issue has arisen when a corporation leases vehicles (especially from owner-operators) as to whether or not it is engaged in for-hire carriage, which would require authority from the ICC.

The growth of corporate conglomerates has given rise to another question, which was not settled until 1980--whether a corporation may haul for its subsidiaries. Generally speaking, a legal entity (such as a corporation) was forbidden to transport for compensation the property of an affiliated, but separate corporation. The Commission did not choose to pierce the corporate veil to find common ownership. However, the Motor Carrier Act of 1980 allows intercorporate hauling if there is 100 percent ownership by the parent corporation of the subsidiary.[18]

This unregulated sector accounted for the bulk of trucking, and few substantial figures were given as to the extent of the industry.

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[17] Id. at 4.

[18] Id. at 6.

Railroads, when complaining about truck competition, focused on the common-carrier industry. The private trucker, who had forsworn common carriage completely, was seldom mentioned.

C. Intrastate Truckers. On a smaller scale than the big interstate trucking companies are the local, or intrastate, truckers. As operators within a single state, these companies were exempt from ICC regulation, even though many shipments might originate out of state with another carrier.[19] In some cases, trailers might be delivered into a state by one carrier, and delivered to a final destination by an intrastate carrier. Since "commercial zones" around major cities were exempt from regulation, a carrier might also be able to deliver and pick up in a neighboring state, if it were within the commercial zone of a city within the state for which it had authority. (Kansas City, KS-MO; Philadelphia-Camden, PA-NJ; Portland-Vancouver, OR-WA are examples).

Although exempt from Federal regulation, intrastate truckers needed authority from the state in which they operated. Most states had licensing schemes similar to that of the Federal government, calling for certificates of public convenience and necessity and control of rates by the state Public Service Commission or similar body. State regulation of interstate carriers was pre-empted by the ICC in 1935, but the states still retained control over intrastate tariffs filed by these carriers. State regulation is older than ICC regulation, but recently there have been some sunset provisions.

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[19] 49 U.S.C. 10525 (1980).

In 1980, Florida deregulated all control by the state over intrastate busses and trucks. In that state there is free entry, exit and rate-making. Other states have considered sunset laws for their motor carrier regulation. State regulation of common carriers cannot be a burden on interstate commerce; i.e. intrastate rates cannot be so low as to discourage the shipment of goods across state lines.[20]

D. Other Exemptions. In addition to the exemptions for private and agricultural transportation, the Motor Carrier Act exempted certain other areas from regulation by the ICC. Within these areas, a more or less free market in transportation flourished:

1. Foreign Commerce. Not only does the ICC have no jurisdiction over purely intrastate carriers, but it also considers "land-bridge" traffic to be exempt, where traffic is en route between two foreign countries. This not only exempts traffic between Canadian points passing through Minnesota or Maine, but has been held to apply to Canadian traffic going to the United States port for transshipping to Europe.[21]

2. Commercial Zones. Local movements within a municipality and its surrounding commercial zone (the suburbs or contiguous towns) are exempt from regulation.[22] This allows local carriers to serve points within a local area without seeking regulated authority, even

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[20] 49 U.S.C. 10931 (1980).

[21] Dempsey, The Expanse of Deregulation: Erosion of the Common Carrier System, 1980 Transportation Law Institute 1, 24.

[22] 49 U.S.C. 10526(b).

if the city is located on a state line.[23] Closely related is the terminal area exemption, by which a line-haul carrier with authority to serve one point may pick up and deliver anywhere within that one community's terminal area.[24] The terms "commercial zone" and "terminal area" are not defined in the statute, but the ICC bases the exemption on the size of a municipality. Thus, the commercial zone/terminal area of a town of 2,500 is a circle of 3 miles radius, but the exempt area for a city of 1,000,000 souls or more is 20 miles.[25]

3. Incident to Air. Many air freight shipments have a prior or subsequent movement by motor carrier. Most air freight to Milwaukee, for example, is handled through O'Hare Airport and trucked into Wisconsin. The Interstate Commerce Act exempted freight with an immediate prior or subsequent movement by air. Part of the reason for this exemption was that the Civil Aeronautics Board had jurisdiction over surface transportation in connection with air transportation. The two agencies worked out an airport zone limit (similar to the commercial zone), usually of about 25 miles from the airport. Within this zone, the CAB had jurisdiction; outside this zone, regulation was the ICC's.[26] If there was one waybill for transportation of freight and the motor traffic was within the terminal area, it was all a CAB matter. Then, in 1977, Congress passed the Air Cargo Dere-

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[23] An interesting situation occurs when the commercial zone runs up against an international boundary, as in Detroit, El Paso, Buffalo or San Diego. This has not been completely settled to anyone's satisfaction. See J. Guandolo, Transportation Law 309-311 (1973).

[24] 49 U.S.C. 10523 (1978).

[25] Dempsey, supra n. 21 at 11.

[26] Id. at 13-15.

gulation Act.[27] Following the spirit of the Act, the CAB eliminated the tariffs for surface carriers incidental to air. Then the Motor Carrier Act of 1980 extended the exemption of effectively deregulating all traffic with a prior or subsequent movement by air.[28] Apparently there are not geographical limits to this exemption.[29]

4. Miscellaneous exemptions. The statute also exempts from regulation the transportation of wrecked vehicles, newspapers, school busses, taxicabs and busses operated by hotels and motels, casual transportation and movements within national parks.[30] The ICC itself allowed relaxed entry which amounted to deregulation for waste products, in an effort to encourage the use of recyclables.[31]

Changes Under the Motor Carrier Act of 1980

The Motor Carrier Act of 1980 did not deregulate the trucking industry. In fact, a recent article in the Wall Street Journal[32] cites the appointment of Reese Taylor as ICC chairman as heralding a return to regulation, or at least an end to further deregulation. What the Act does is to make it easier for applicants to gain authority or to expand existing authority.

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[27]Pub. L. No. 95-163 (Nov. 9, 1977), 91 Stat. 1278.

[28]49 U.S.C. 10526(8) (B) (1980).

[29]Dempsey, supra n. 21 at 19.

[30]Id. at 27-28.

[31]Dempsey, supra at 29.

[32]Karr, New ICC Chairman Reese Taylor Moves to Halt Trucking - Industry Deregulation, Wall St. Journal Aug. 5, 1981, p. 46, c. 1.

The new Act rearranges the burden of proof to provide that an applicant (in addition to proving fitness) must show only that his proposed service will serve a useful public purpose, responsive to public demand or need. The burden is on the protestants to show that the service is inconsistent with the public convenience and necessity.[33] This is a drastic change from the former procedure, wherein the applicant had to prove that his service was required by public convenience and necessity.

In addition, the new legislation permits the Commission to issue "master certificates" wherein the findings of public convenience and necessity are made in a rulemaking procedure. True, the Act prohibits the issuance of a master certificate except in certain areas, but in these areas, only the applicant's fitness is an issue. If the Commission finds the applicant fit, willing, and able, he will be awarded authority to serve these markets:

a. where a community is not regularly served by another motor carrier;

b. when rail service to a community has been abandoned;

c. movements of U.S. government property (with some exceptions);

d. small shipments (under 100 lbs.); and

e. movements of foodstuffs and fertilizers by an owner-operator, provided that the owner-operator remains with the truck at all times.[34]

This amounts to substantial deregulation of these areas. Protests are of no avail in "fitness" applications, and the Act includes

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[33] 49 U.S.C. 10922(b) (1) (1980).

[34] 49 U.S.C. 10922(b) (4) (1980).

standards designed to assure that only protests of substance can be made in other application proceedings. A protestant must have authority to handle the traffic, and actually has handled such traffic within the last year. Motor contract carriers are now prohibited from protesting common carrier applications.[35]

The Commission is directed to eliminate gateways and circuitous route limitations and to remove operating restrictions in certificates. This directive includes: broadening the restrictive categories of goods allowed to be transported; removing restrictions against serving intermediate points; converting all one-way authority to round-trip authority; to eliminate narrow territorial limitations and other restrictions wasteful of fuel, inefficient, or contrary to the public interest. Thus, if a carrier applies, the ICC must reform its certificate to provide for a more comprehensive grant of authority.[36]

A greater number of commodities now come within the exempt authority category. Fish and shellfish byproducts not intended for human consumption are now exempt, as are livestock and poultry feeds, agricultural seeds, and plants if transported to a farm or business selling to farmers. In addition, all incidental-to-air motor freight operations are exempt, so are used pallets, shipping containers and devices, natural crushed rock used for decorative purposes and wood chips.[37]

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[35] 49 U.S.C. 10922(b) (3) (1980).

[36] 49 U.S.C. 10922(h) (1980).

[37] 49 U.S.C. 10526(a) (1980).

A new Section 8 permits sellers of food and grocery products to compensate customers who pick up their own products without being guilty of discriminatory pricing.[38] Intercorporate hauling for compensation is permitted for wholly-owned subsidiaries, upon notice to the Commission. This intercorporate hauling is now termed private carriage.[39]

Entry rules are modified for contract carriers by deleting the requirement of a limited number of shippers. The old "rule of eight" is abolished. One-truck companies can obtain master certificates for the carriage of processed foods, and the prohibition against dual operations (common and contract authority) has ended.[40]

Deregulation of trucking is more than simply easing entry to the field. The new Act creates a ten-percent zone of reasonableness, within which rates may be raised or lowered without any investigative or suspension jurisdiction of the ICC. The Commission may, on its own, increase this zone an additional 5%. After two years, this zone would be adjusted to account for changes in the Producer Price Index.[41] In addition, there is a new provision for released rates, by which the shipper would get a reduced rate in exchange for reduced exposure to liability by the carrier.[42] This is the first crack in the common-carrier liability which has traditionally been imposed by the ICC.

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[38] 49 U.S.C. 10732 (1980).

[39] 49 U.S.C. 10524 (1980).

[40] 49 U.S.C. 10923 (1980).

[41] 49 U.S.C. 10708(d) (1080).

[42] 49 U.S.C. 10730(b) (1980.

It remains to be seen whether the trucking industry will follow the lead of the deregulated air freight industry and shift the insurance burden of loss and damage to the shipper.[43] The Commission is directed to adopt revenue standards which will provide motor carriers "a flow of net income, plus depreciation, adequate to support prudent capital outlays, assure the repayment of a reasonable level of debt, permit the raising of needed equity capital, attract and retain capital in amounts adequate to provide a sound motor carrier transportation system in the United States, and take into account reasonable estimated or foreseeable future costs".

With regard to rate bureaus, the new law prohibits discussion and voting on single-line rates by rate bureaus by 1984. It prohibits rate bureaus from interfering with independent actions, makes rate bureau meetings open to the public, and requires that rate bureaus have written authority from carriers being represented for voting purposes.[44] Rate bureaus are not being phased out but their activities are curtailed.

Some of the criticism of proposed deregulation was raised by advocates of small towns. They were afraid that the carriers might ignore the smaller communities were they allowed to skew their roots to more profitable areas, as has happened with airlines since deregulation. Congress insisted that the Commission conduct a study of service to small towns (5,000 or less), including an analysis of the

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[43] W. Thoms, Deregulation: The Airline Experience 47-50 (1981).

[44] 49 U.S.C. 10706 (1980).

common carrier obligation to provide service to small communities, and an evaluation of whatever effect the new law has on small towns. This report is due on February 1, 1982.[45]

The Motor Carrier Act of 1980 substantially leaves the ICC intact. It gives new guidance to that agency and exempts a number of areas for service. It makes entry easier, and makes it more difficult for certificated carriers to protect their market share. It may make some operating rights worthless. But it does not abolish the common carrier principle, nor the binding effects of tariff. It keeps in modified form the Pan-American test of public convenience and necessity, and preserves the necessary oversight function of the ICC. That agency will still be regulating some forms of motor carriage during its centennial in 1987.

The year following the passage of the Motor Carrier Act has been one of increased movement toward deregulation. It is clear that the ICC has now adopted competition as its watchword. Many new operators are being granted authority far beyond what they intend to serve, and there are reports of carriers getting in over their heads and being overextended. Safety and financial responsibility are now the responsibilities of the Department of Transportation, which to date reports no great setbacks in that area.

The Motor Carrier Act was passed to end what many observers thought to be abuses of the regulatory process. Unimaginative utility-type regulation had been applied to an industry with few of the

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[45]Motor Carrier Act of 1980, Section 28.

characteristics of natural monopoly. Congress stopped, however, at a complete sunset law, knowing that it is important to retain some type of oversight over the practices of an important industry. Anti-trust regulation would be an after the fact ad hoc approach by a non-expert, often politicized Justice Department. The 1980s will show if competition can coexist with a regulatory framework, and if the public will continue to be well served by our privately-owned motor carriers.

In addition to the well-known statutes completely deregulating air freight and gradually deregulating airline passenger service, Congress has passed the Household Goods Transportation Act.[46]

The philosophy of the Household Goods Act is the opposite of that of the Motor Carrier Act. Here Congress felt that competition should be coupled by increased oversight. Congress also declared that the function of the ICC was to protect the homeowner and small shipper. Evidently that disparity in bargaining position between the shipper and carrier is responsible for the different concern toward moving vans. It also should be remembered that Congress attempted to meet a major criticism that was voiced about the regulatory scheme of the Motor Carrier Act, and enacted a specific consumer-oriented regulatory law.

Opportunity for Small Operators

The main beneficiaries of the Motor Carrier Act of 1980 to date have been existing carriers who have expanded their services. None-

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[46]Public Law No. 96-454, 94 Stat. 2011 (Oct. 15, 1980).

theless, opportunities arise under the Act for exempt truckers and new applicants to improve their services and profit pictures.

A. Increased Exempt Areas. The agricultural carrier now will find that foodstuffs currently include fees, seeds and some fish and shellfish byproducts. Any movement incidental to air is exempt, and requires no certificate of authority. Agricultural co-ops now may haul up to 25% of their total interstate tonnage in non-exempt commodities, as opposed to 15% of their tonnage under the old law.[47] The Commission is authorized to require co-ops to maintain detailed records with the ICC to insure that the co-ops comply with the tonnage and other requirements of the statute.

B. Relaxation of Backhaul Restrictions. The Commission is directed to broaden the restrictive categories of goods allowed to be transported, remove restrictions against serving intermediate points, convert oneway authority to round-trip authority and eliminate other restrictions wasteful of fuel, inefficient, or contrary to the public interest. Thus, if a carrier applies for it, the ICC must reform an existing certificate to provide for a more comprehensive grant of authority.[48]

C. Fitness-Only Exemptions. In some situations the applicant merely has to prove that he is fit, willing and able to perform the service proposed. The 1980 Act defines these situations as those where:

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[47] 49 U.S.C. 10529 (1980).

[48] 49 U.S.C. 10922(h) (1980).

1. a community is not regularly served by another certificated motor carrier;

2. where the service is to substitute for recently abandoned rail service;

3. where the shipment is for the U.S. government (except household goods and hazardous materials);

4. where the service is delivery of small packages under 100 pounds;

5. where the delivery is of foodstuffs and fertilizer by an owner-operator, who stays with his truck at all times.[49]

D. Private Carriage. This category has been expanded to include hauling for wholly-owned subsidiaries of the parent company. In addition, contract carriers may expand their services by contracting with even more shippers for specially-tailored transportation service. Agricultural carriers would be wise to obtain contracts for backhaul of non-exempt property, and to acquire contract carrier authority. Such shipments might be arranged through the aid of food brokers.

E. Restrictive Routings. The Commission is authorized to eliminate gateways and circuitous route limitations and to remove operating restrictions in certificate. This means that truckers with existing authority may improve their route patterns and compete with carriers who had been using more direct routes.

F. Deregulation Philosophy of the ICC. In the past year, the ICC has favored free entry into the field of trucking. According to Paul Dempsey, formerly of the University of Denver Transportation Law program, and now the ICC, under the post-1980 ICC, protes-

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[49] 49 U.S.C. 10922(b) (4) (1980).

tants "have been absolutely unable to prevail in any single case". This may be coming to an end with the appointment to the chairmanship of Reese Taylor, who has favored the policies of the new law, but has backed off from approving broad grants of across-the-board authority.[50]

G. Outlook for the Future. There will be more opportunity in the future for small trucking operations, but the less control on routes and rates, the opportunity for business failures will also be present. The ICC can be expected to follow the provisions of the new law, but it appears as if complete deregulation and freedom to compete will not be achieved. Rather, the ICC will continue to assure small towns and communities adequate service by a watchdog role in entry to the field of trucking. ICC control of rates, by contrast, can be expected to diminish, and competition may set the rules for pricing.

THE STAGGERS RAIL ACT - BANE OR BOON

John Finsness*

In transportation circles, the Staggers Act, the law deregulating--or if you prefer reregulating--the railroads, has been seminared to death. I wish I could say talked to death, but I am afraid it won't go away so easily.

Like most laws affecting special interests this one is a bane or a boon depending upon who you are and what you do.

In North Dakota, rail deregulation can be a great detriment to small business and to the farmer. Will trucking firms, particularly exempt motor carriers, benefit from this legislation?

The purpose of this presentation is to point out some of the factors of deregulation which may affect the trucking industry in North Dakota.

Inflationary Cost Increases

In an effort to expedite recovery of inflationary cost increases, the Interstate Commerce Commission (ICC) may prescribe a cost inflation index upon which the railroads can immediately assess higher freight rates. The purpose of this cost index is to eliminate the past time lag for cost recoupment. Rail rates can change quarterly using this cost inflation index. Exempt trucks should have no difficulty responding accordingly and in like degree providing that they don't cut each others throats.

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Rate Deregulation

If it is found that railroads do not have market dominance, the jurisdiction of the ICC with respect to maximum rate controls is removed. In other words, if a particular segment of traffic is not found to be market dominant to the railroads, the market place (competition) will regulate rates. The American Association of Railroads estimates that two-thirds of rail rates fall in this category of not being market dominant. Thus, two-thirds of rail rates may be subject to control via competition. Trucks represent the primary competition to railroads in North Dakota. Therefore, trucks are the only barrier between railroads and the North Dakota producer where market dominance does not exist.

Market Dominance

Upon showing that a particular rate yields a revenue to variable cost ratio above a certain threshold level (currently 160 percent but increasing to 170-180 percent in 1984) the ICC then has the jurisdiction to decide first whether or not market dominance exists and whether or not to invoke rate regulation.

At present a substantial portion of railroad traffic could be considered market dominant. For example, in five crop reporting districts the railroads have captured over 70 percent of the market measured in bushels of grain shipped. (See Figure 1).

With regard to revenue to variable cost ratio, it is not clearly established, at present, what proportion of North Dakota traffic is

market dominant or otherwise. While revenue-cost statistics calculated using Rail Form A indicate that the preponderance of grain traffic is market dominant, this must yet be reconciled with the new costing methodology which is currently being implemented by the ICC.

It is conceivable, though certainly not apparent, that the costs of operations may be found to be higher on various lines and on various carriers' systems than heretofore thought. The probabilities are that very little traffic will be found to be market dominant and thus subject to ICC control. The thrust is to allow competition to set freight rates for both rails and trucks.

Surcharges on Joint Line Rates

The new law for the next three years allows a carrier to apply a surcharge to any joint line rate that does not yield 110 percent of variable cost. Carriers with inadequate revenues may apply surcharges to cover all costs of service on lines carrying less than three million gross ton miles per year. Carriers earning adequate revenues can surcharge lines carrying less than one million ton miles per year. Most, if not all, North Dakota branch lines fell within the three million gross ton-mile category. Railroads using these surcharges have the potential to effectively abandon unprofitable or marginal branch lines. Truckers should be aware of this factor for anticipating potential loads. For example, if a trucker finds a particular rail line is subjected to surcharges that trucker

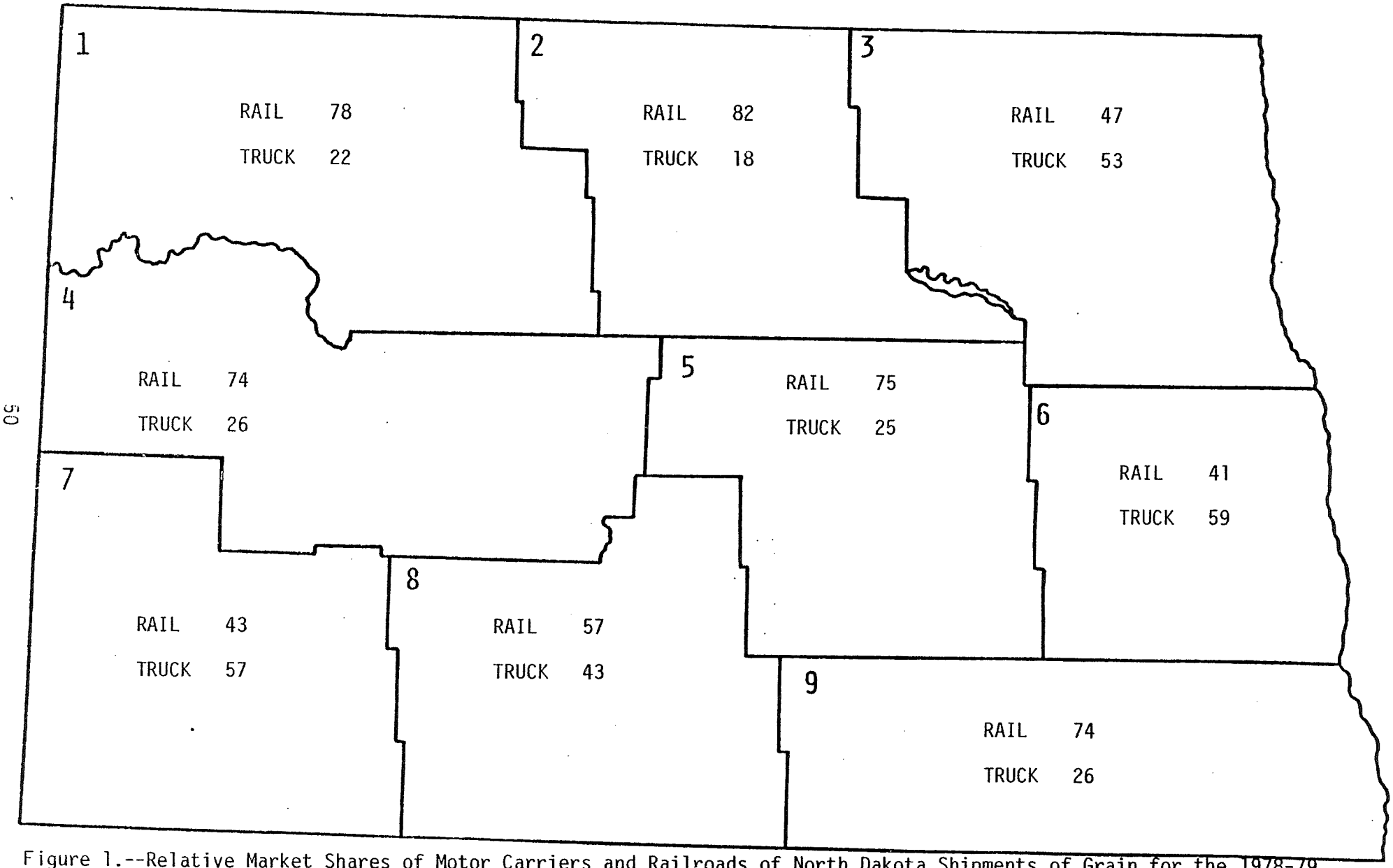


Figure 1.--Relative Market Shares of Motor Carriers and Railroads of North Dakota Shipments of Grain for the 1978-79 Crop Year.

Source: Ken Casavant and Gene Griffin, "An Evaluation of North Dakota Grain Movements," unpublished, The Upper Great Plains Transportation Institute.

can anticipate additional loads from elevators and other shippers on that line. In addition, truckers may seek to adjust their rates taking into account these surcharges.

Contracts

The railroads have for some time been allowed to contract with shippers with regard to service and rates. However, there was considerable doubt concerning their validity expecially when the Commission undertook to interpret them and change their provisions.

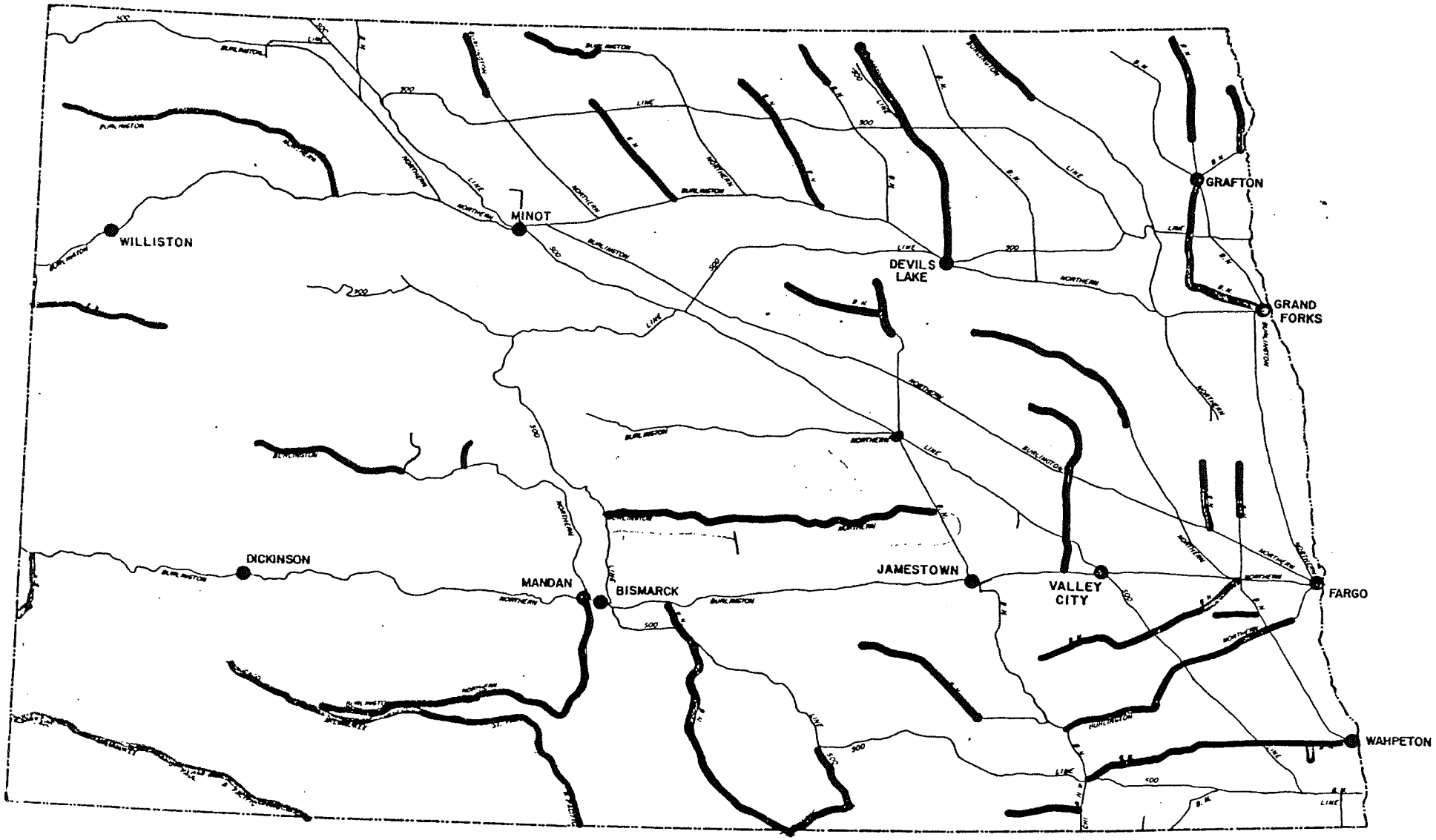
The new law removes all doubt. Contract rate agreements are now legal so long as they are filed with the Commission along with a summary of the contract which must be made available to the public. There are several problems facing truckers with respect to these contracts. First, railroads with a relatively high fixed cost component have greater pricing flexibility. Generally, contract rate agreements will be used with multiple car movements or on high density lines. Such movements usually are less costly than other segments of traffic and may then be subjected to lower rates. Only shippers can attempt to block rail contracts; however, due to rapid fluctuations in supply and demand, contracts are not expected to be utilized in the movement of grain from elevators to the markets.

Rail Line Abandonment

The new Act will facilitate the abandonment of unprofitable or marginal branch lines. Figure 2 contains a map of North Dakota released by the BN recently announcing potential rail lines either up

NORTH DAKOTA

LINES SUBJECT TO ABANDONMENT



CATEGORY 1 (3 years)
CATEGORY 2 (future)
CATEGORY 3 (pending)

FIGURE 2

PREPARED BY
INTERMODAL PLANNING
AND RAIL ASSISTANCE DIVISION
7-1-81

LINE DESCRIPTION	R.R.	CATEGORY	DATE FILED	ND MILEAGE
New England to McLaughlin, SD	MILW	3	05-15-81	123.61
Marmarth to Lemmon, SD	MILW	3	05-15-81	102.73
Wishek to Pollock, SD	SOO	2	05-01-78	35.93
Ellendale to Oakes	BN	1	06-26-81	27.82*
Milnor to Oakes	BN	1	06-26-81	32.20
Oakes to Crete	BN	1	05-01-77	-
Crete to Gwinner	BN	1	03-31-80	-
Drayton to Joliette	BN	1	06-26-81	15.50
York to Dunseith	BN	1	06-30-78	41.79
Hannaford to Binford	BN	1	03-31-80	24.90
Towner to Newburg	BN	1	03-31-80	35.26
Hunter to Blanchard	BN	1	06-26-81	10.42
Rolla to St. John	BN	1	06-26-81	7.24
Devils Lakes to Hansboro	BN	1	06-26-81	66.59
Edgeley to Streeter	BN	1	06-26-81	39.83
Tuttle to Wilton	BN	1	06-26-81	37.77
Sanborn to Hannaford	BN	1	06-26-81	26.03
Hazen to Truax	BN	1	06-26-81	6.37
Zap to Killdeer	BN	1	06-26-81	40.86
Beach to Golva	BN	1	06-26-81	12.86
Wahpeton to Milnor	BN	2	06-26-81	40.49
Langdon to Hannah	BN	2	06-26-81	21.00
St. Thomas to Neche	BN	2	03-31-80	25.08
Grand Forks to Grafton	BN	2	03-31-80	44.65
Clifford to Erie	BN	2	06-26-81	17.75
Addison to Chaffee	BN	2	06-26-81	11.79
Casselton to Marion	BN	2	03-31-80	60.18
Sheyenne to Minnewaukan	BN	2	03-31-80	18.66
Oberon to Esmond	BN	2	03-31-80	28.07
McKenzie to Linton	BN	2	03-31-80	44.22
Linton to Eureka, SD	BN	2	06-26-81	37.67
Pingree to Tuttle	BN	2	03-31-80	55.00
Valley City Low Line	BN	2	06-26-81	4.82
Mohall to Sherwood	BN	2	06-26-81	14.58
Lisbon to Independence	BN	2	03-31-80	25.60
Horace to Lisbon	BN	2	06-26-81	46.29
Finley to Warwick	BN	2	06-26-81	50.02
Landa to Antler	BN	2	06-26-81	17.58
Stanley to Grenora	BN	2	06-26-81	87.09
Watford City to Fairview, MT	BN	2	06-26-81	36.58
Mandan to Mott	BN	2	06-26-81	99.10
Golva to Carlisle, MT	BN	3	06-18-81	4.44
			TOTAL	1478.37

*Includes 7.83 miles of trackage rights on CNW from Oakes to Ludden.

TOTAL ND MILEAGE IN CATEGORY:

Category 1 (3 years)	425.44
Category 2 (Future)	822.15
Category 3 (Pending)	230.78

RAILWAY LINES AUTHORIZED FOR ABANDONMENT

Line Description	RR	Authorized	By	Mileage
Joliette to Pembina	BN	05-09-80	ICC	12.21
Devils Lake to Warwick	BN	12-05-79	ICC	21.09
Forbes to Ellendale	BN	03-04-80	ICC	13.47
Fargo to Ortonville, MN	MILW	02-29-80	Court	69.50
Brampton to Andover, SD	MILW	03-20-80	Court	4.20
Edgeley to Aberdeen, SD	MILW	02-29-80	Court	31.50
Great Bend to Fairview Jct.	BN	06-03-81	ICC	8.81
McHenry to Binford	BN	01-15-81	ICC	11.69
Newburg to Dunning	BN	02-23-81	ICC	5.61
				178.08

for abandonment, pending, or under consideration. Table 1 identifies the lines and the stage of the abandonment procedure.

The Grand Scheme

The Burlington Northern has announced a grand scheme to abandon almost 1500 miles of branch line track in North Dakota. A trucker's dream? Not quite. Another grand scheme is already in the works. And that is the publishing of 26 car, 2-4 origin rates, 26 car single origin rates and 52 car single origin rates to Duluth and Minneapolis 15 cents, 20 cents and 25 cents respectively lower than single car rates.

The obvious purpose is to encourage (maybe force?) the development of sub-terminals capable of shipping 52 cars at a crack.

Some shippers claim that this will not work. If it doesn't, long haul trucking from abandoned lines should increase. If it does work, long haul trucking should decline (the railroad's purpose). However, if it does work, short haul trucking from 25 to 75 miles should increase.

I expect that the exempt trucker is flexible enough to roll with the punches and remain a viable competitor.

Summary

The Staggers Rail Act deregulates the railroad industry--reregulates if you prefer. The effects of the Act can be both beneficial or detrimental depending on your point of view. Large shippers could be expected to benefit from the Act, small shippers are not expected

to benefit. Truckers in North Dakota may be able to benefit. For example, about one-half of BN rail lines are at least being considered for abandonment. Trucks are the only mode that can fill the transportation gap to shippers on these lines. Traffic on main lines may experience some rate reductions below truck costs.

The Staggers Rail Act substantially lessens regulatory controls over the railroad industry. The implications surrounding this Act imply a loss of service to unprofitable lines or an increase in the rates either thru rate increases or surcharges. In either case the trucker can experience some increases in traffic. The important point to remember is that in North Dakota about 50 percent of the rail lines are at least being considered for abandonment. The trucker then will be the only mode of transport for shippers on those lines.

AGRICULTURAL TRUCKING GROWTH IN NORTH DAKOTA

Gene C. Griffin*

Growth in Trucking

Truck movement of exempt grains and oilseed ex-North Dakota has increased substantially in the past six years both in terms of market share and absolute volume. The truck share of the grain and oilseed transportation market increased from nineteen percent in 1974-75 to a high of forty-one percent in 1978-79 followed by a slight decrease of three percent in 1979-80 (Figure 1). The balance of the traffic was hauled by rail.

Although the modal split for trucks has doubled in the past six years the increase in the absolute volume of grain and oilseed handled has been even more dramatic. The total number of bushels of grain and oilseed transported by truck from North Dakota increased from a low of 53.6 million bushels in 1974-75 to a high 185.1 million bushels in 1978-79 followed by a slight decline in 1979-80 (Figure 2). This increase amounts to 242 percent in just five years.

There are at least two basic reasons for the tremendous growth in trucking of exempt commodities in the past six years, a protracted rail transportation capacity shortage and grain handling capacity shortage which lasted from October of 1977 through January of 1980 and rail pricing policy which made trucking of exempt commodities

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*Director of the Upper Great Plains Transportation Institute, North Dakota State University, Fargo, North Dakota.

profitable. During the quote, "car shortage", there was a total shortage of total transportation capacity and/or export throughput capacity which allowed for expansion of existing truck firms and entry of new firms. The expansion of the trucking industry was aided by the inability of railroads to expand capacity very quickly and alternatively by the truck industries ability to expand capacity rather easily by increasing utilization of trucks and putting more trucks on the road. Rail rates were sufficiently high on wheat and sunflower during this time period to allow for profitable trucking. This also encouraged expansion of the trucking of exempt commodities from North Dakota. Other reasons for growth include the tremendous increase in production of sunflower and the nature of the movement of sunflower which is very seasonal.

The growth in exempt carriage has taken place primarily in the eastern one third to one half of the state. Exempt carriage increased from 18 percent to 41 percent in crop reporting district 3 between 1974-75 and 1978-79 (Table 1). In crop reporting district 6 exempt carriage increased from 28 percent to 59 percent during the same time period. Although truck share of the modal split increased considerably in crop reporting districts 7 and 8 the absolute volume increase was comparatively small because of the low production density of these regions. The eastern one-half of the state accounted for 85% of the truck movement during the 1978-79 crop year (Figure 3). The CRD's of the state in which significant growth in exempt carriage occurred have two common characteristics which differentiate

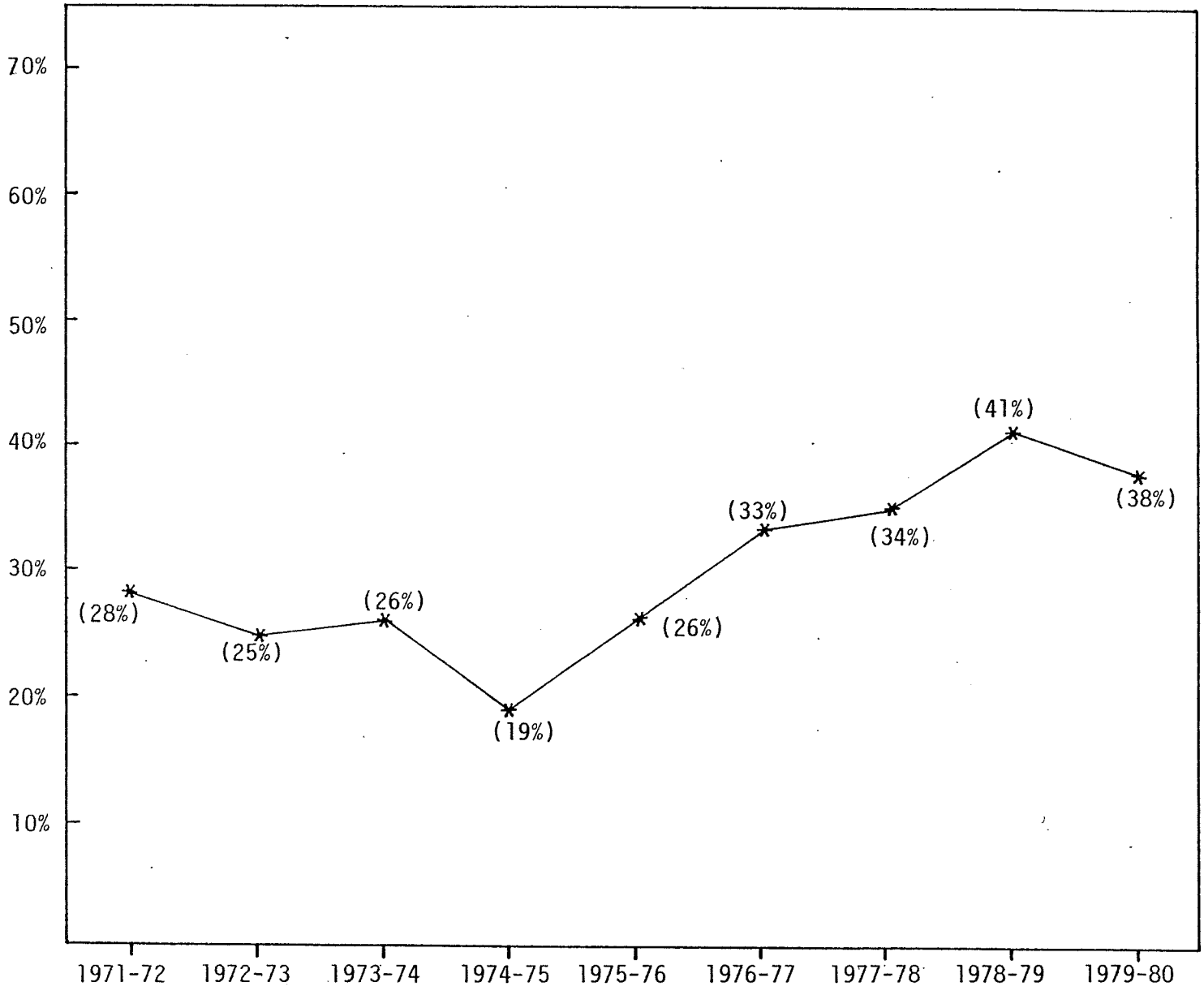

Figure 1. Shipments of North Dakota Agricultural Commodities by Truck.
(Percent of Total)

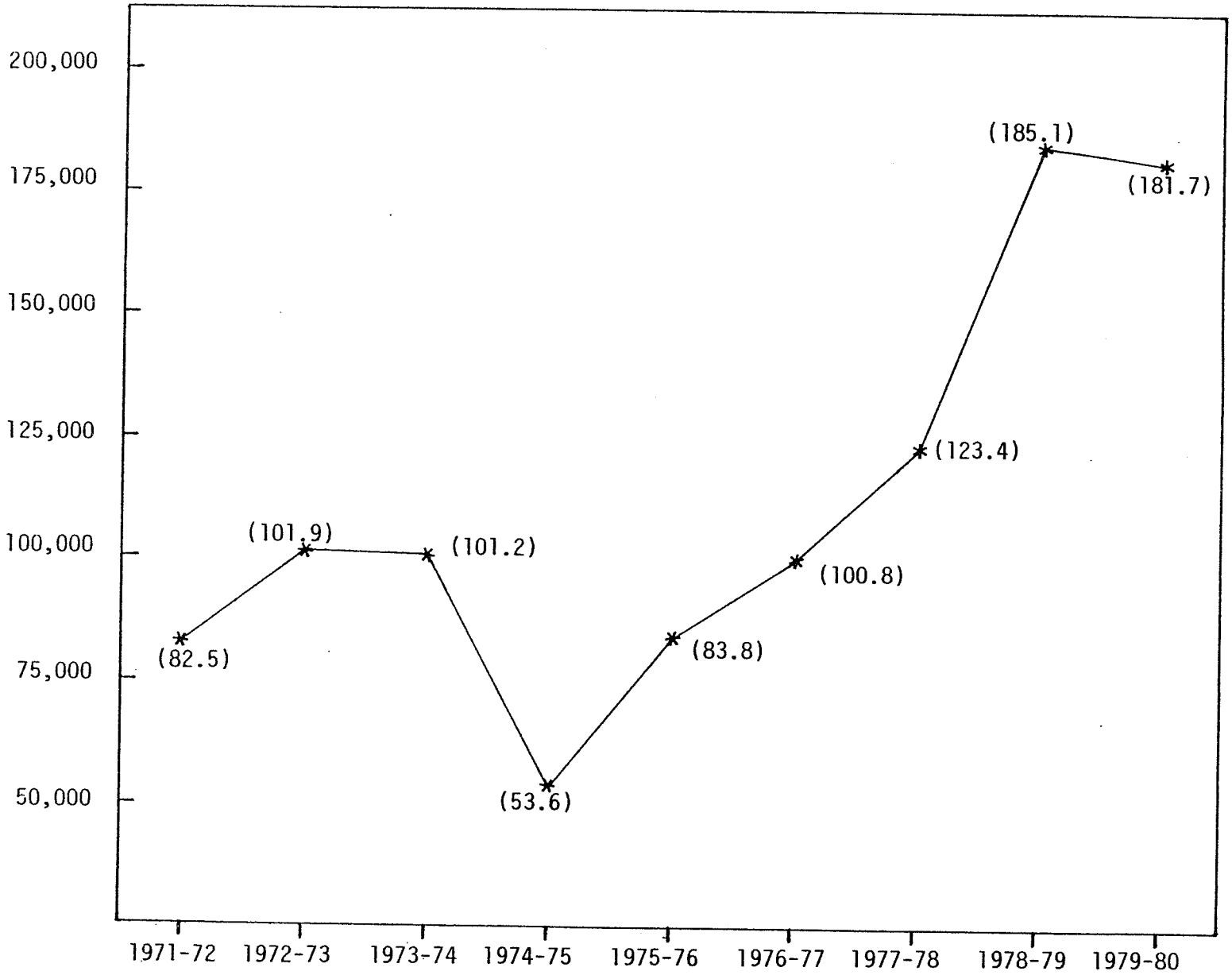

Figure 2. Shipments of North Dakota Agricultural Commodities by Truck.
(000,000 bushels)

it from the rest of the state, one, this region is closer to the Minneapolis and Duluth terminal markets than any other part of the state and secondly it is the region which has experienced a tremendous increase in sunflower production. Both of these factors have influenced the growth of agricultural trucking in North Dakota.

TABLE 1. TRUCK SHARE OF NORTH DAKOTA GRAIN AND OILSEED MOVEMENTS BY CROP REPORTING DISTRICT FOR SELECTED YEARS.

Crop Reporting District	Year					
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
	(percent)					
1	19	18	24	19	21	21
2	21	26	27	26	30	30
3	18	24	29	32	41	35
4	19	18	25	24	25	30
5	17	22	30	35	40	42
6	28	34	41	49	59	51
7	31	39	60	60	54	54
8	24	24	40	45	45	54
9	19	26	33	31	33	35

Source: Unpublished grain movement data, Upper Great Plains Transportation Institute, North Dakota State University, Fargo, North Dakota.

The commodity which contributed most of the growth in trucking of exempt commodities was sunflower which increased from 4.7 million bushels in 1974-75 to 69.1 million bushels in 1980-81 (Table 2). Hard wheat contributed to a significant portion of the growth as

well accounting for an increase of 37.9 million bushels between the year of lowest movement, 1974-75 and the year of peak movement of 1979-80. Durum wheat and barley also contributed to the growth but to a much lesser extent than sunflower or hard wheat.

TABLE 2. AGRICULTURAL COMMODITY MOVEMENT BY TRUCK FROM NORTH DAKOTA FOR SELECTED YEARS.

Commodity	Crop Year						
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
	(000,000 bushels)						
Hard Wheat	25.4	37.5	41.7	41.4	76.1	63.3	43.3
Durum Wheat	6.4	11.9	10.4	12.9	17.6	15.3	7.5
Barley	7.4	8.9	25.1	21.9	17.3	16.9	14.9
Sunflower	4.7	7.7	7.1	32.7	57.8	68.6	69.1

Source: Griffin, Gene C., North Dakota Grain and Oilseed Transportation Statistics 1980-81, Upper Great Plains Transportation Institute, North Dakota State University, Fargo, North Dakota, UGPTI Report No. 42, March, 1982.

Duluth-Superior accounted for the lowest increase in volume of North Dakota truck movement of the three major terminal markets which serve North Dakota. Truck movements to Duluth increased form 23.2 million bushels in 1974-75 to 92.2 million bushels in 1979-80 (Table 3). The absolute volume of truck moved grain and oilseed also increased dramatically to Minneapolis-St. Paul increasing from 18.6 million bushels to 40.7 million bushels.

Railroad Pricing Reaction to Growth

Railroads management reaction to price competition from the truck mode has been quite consistent over the past twenty years since trucks became viable competitors in the transportation of grain and oilseed. The railroads have typically met truck competition by reducing the single car rates which have been in effect. Railroads reduced rates on wheat from North Dakota as a result of diversion of traffic to the truck mode in 1960, 1963, and 1971. The reductions were to the Minneapolis-St. Paul and Duluth-Superior markets.

The result of rail rate reductions has been a diversion of traffic back to the rail mode. An example of such a movement is the drop in truck share of the hard wheat movement to Duluth-Superior (Figure 4). Just prior to the December 1971 rate adjustment the trucks accounted for 56 percent of the Duluth movement. Following the rail rate reduction the truck share dropped to 35 percent and 16 percent in the next two succeeding crop years. A similar drop in truck share of the market also took place in the Minneapolis-St. Paul market dropping from 37 percent to 33 and 24 percent in the succeeding two years (Figure 5).

The barley rates to Duluth-Superior have also been reduced to meet truck competition. Rail rates were reduced in 1978 in response to a 78 percent truck share of the market in 1976-77 and a 73 percent share in 1977-78 (Figure 6). The truck share of the market dropped

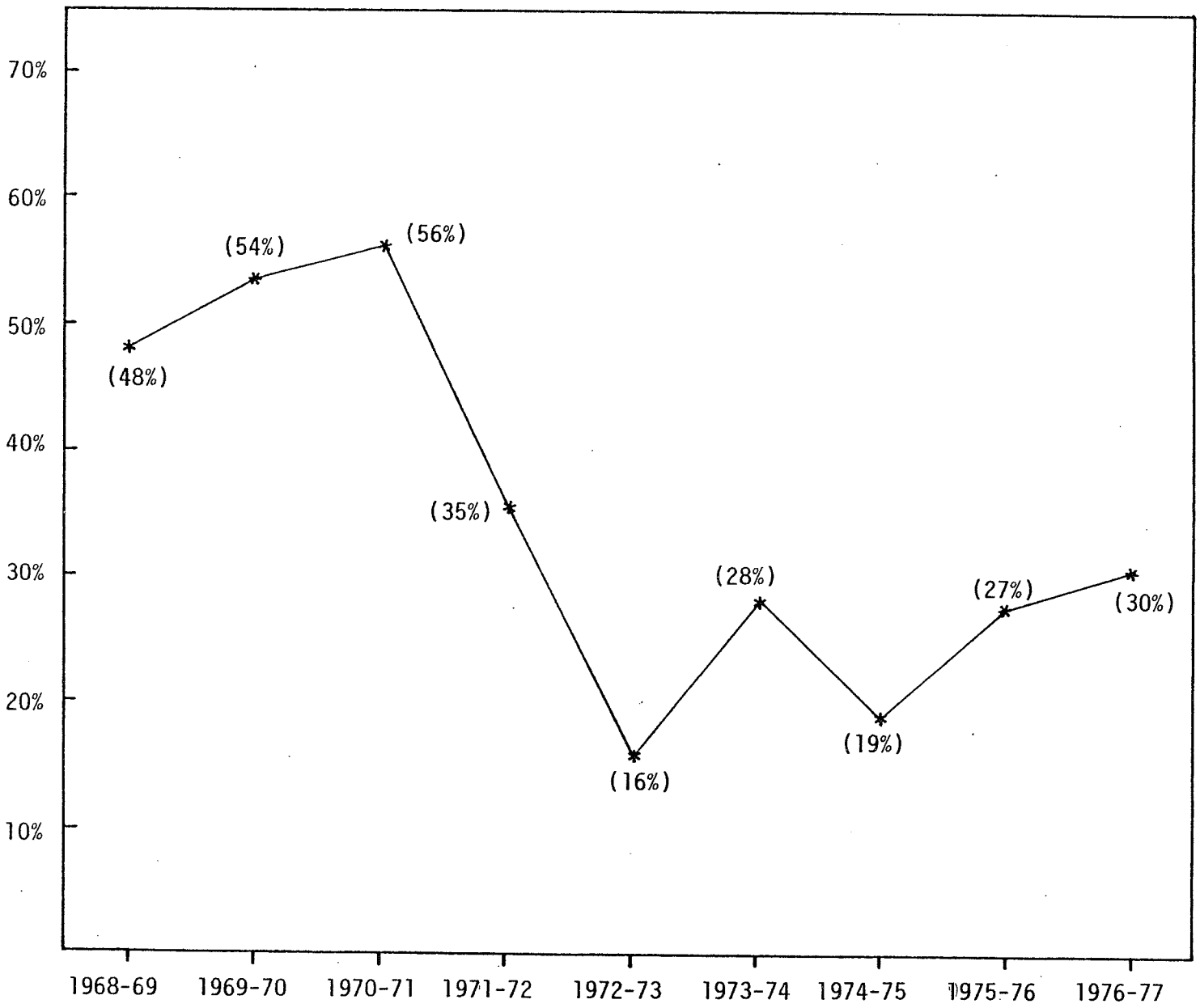

Figure 4. Hard Red Spring Truck Movements to Duluth-Superior.

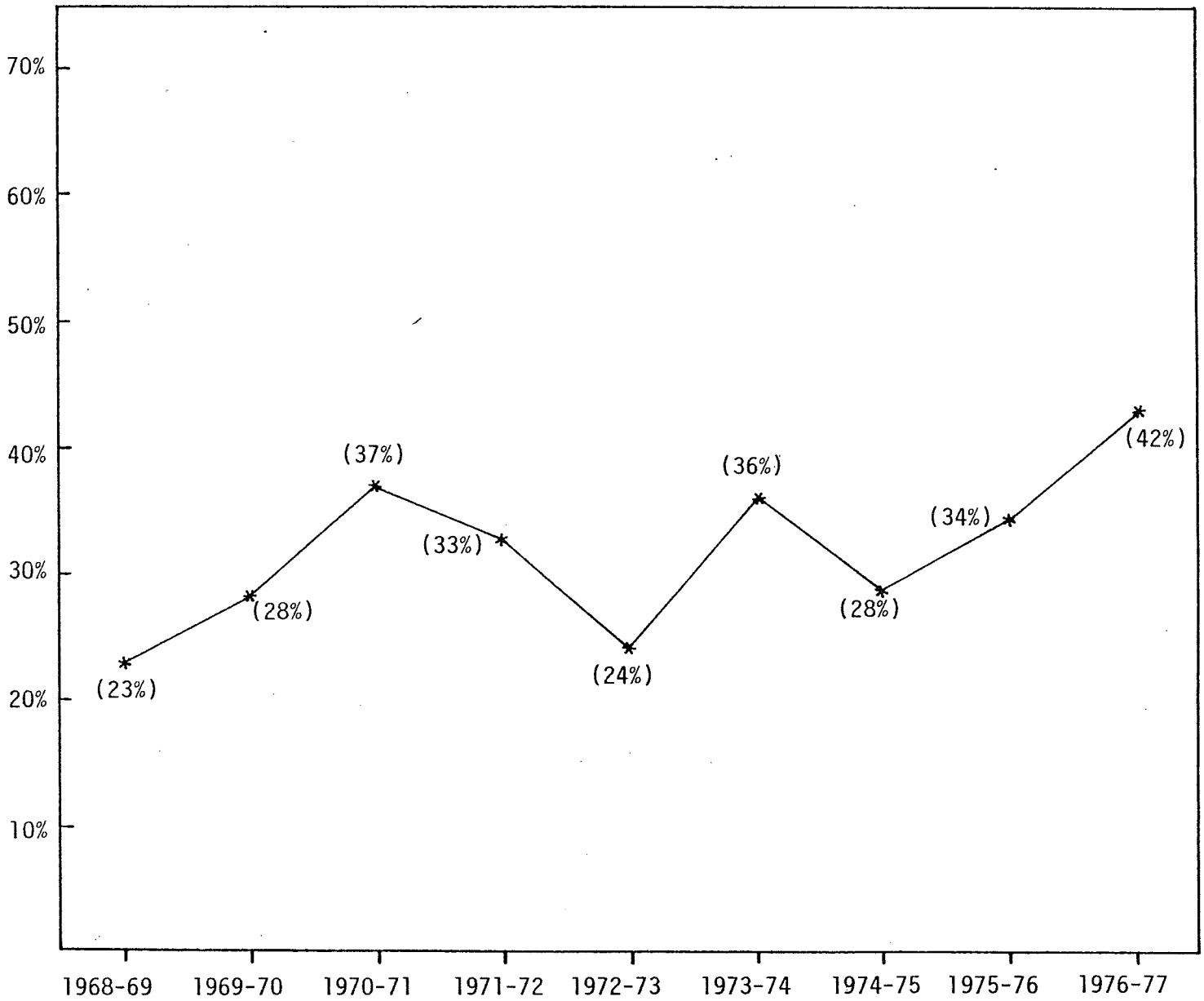

Figure 5. Hard Red Spring Wheat Truck Movements to Minneapolis - St. Paul.

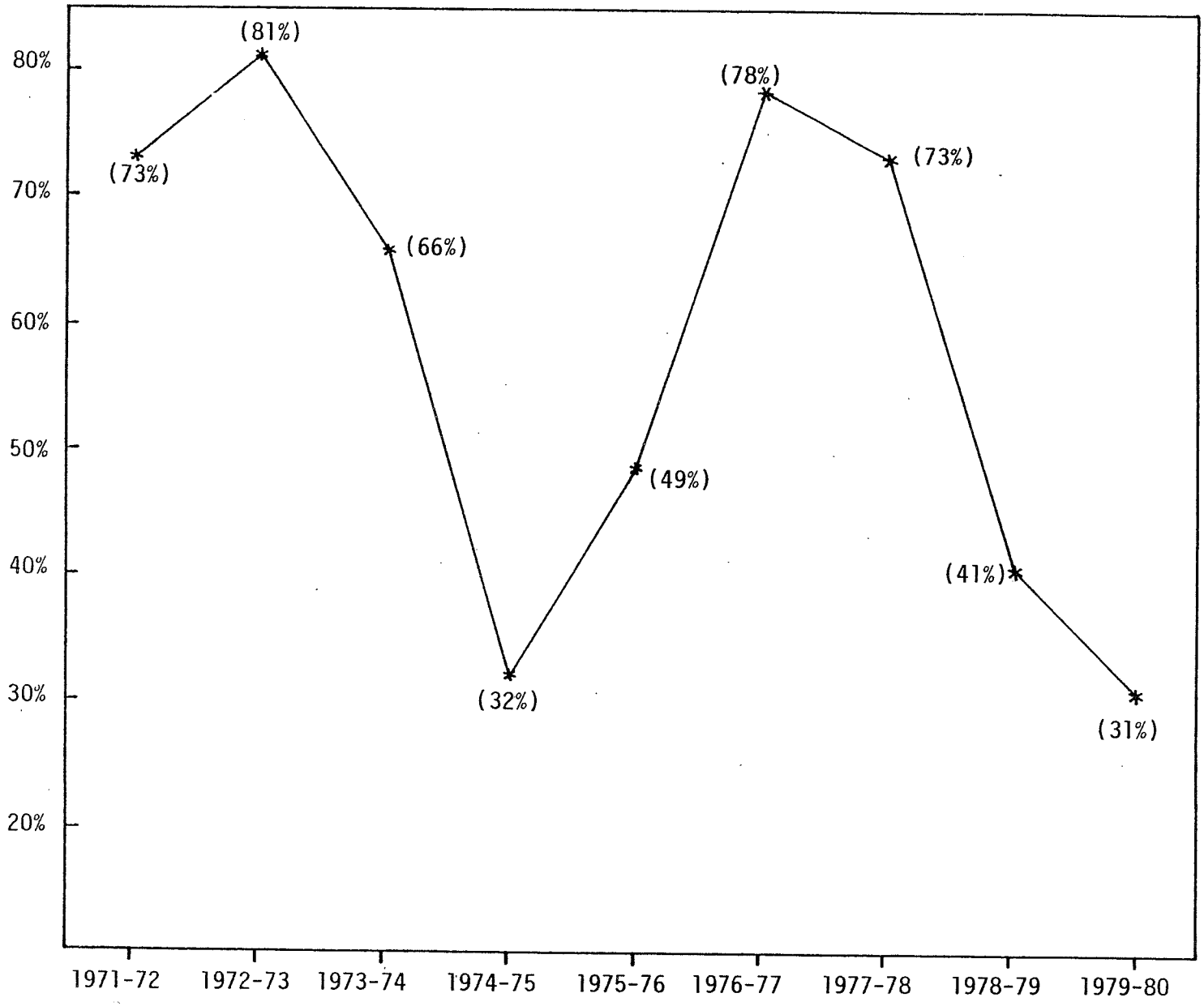

Figure 6. Barley Movements by Truck to Duluth - Superior.

to 41 percent and 31 percent in the succeeding two years of 1978-79 and 1979-80.

Multiple Car Rates Introduction

Truck competition on wheat moving to the Pacific Northwest has fostered the most recent rail rate reductions and an introduction of the multiple car rate concept to North Dakota agricultural commodity rail transportation. The rail rate reductions were due primarily to truck-barge competition. Wheat has been diverted from rail to truck in Western North Dakota and Montana. The wheat is being transshipped by barge from Lewiston, Idaho and other river terminal points on the Columbia-Snake to Portland and other ocean ports on the lower Columbia. Wheat is also being trucked from North Dakota and Montana direct to Pacific Northwest Ports.

Wheat movements by truck to the Pacific Northwest from Western North Dakota and Montana have increased over time to the point where trucks accounted for 38 percent of the North Dakota movement in 1979-80 and 46 percent of the movement in 1980-81. The railroads have countered with several individual single car rate reductions up until the introduction of multiple car rates in December of 1980.

The reduction of rates and introduction of multiple car rates in December of 1980 was very significant in that it was the first time the railroads have countered truck competition with something other than price competition. With multiple car rates the railroads introduced service differentiation into the transportation market in North

Dakota. Prior to multiple car rates the only rates available to North Dakota shippers were the single car rate and the truckload rate. Both types of service were good substitutes with one another with some slight differences in slight characteristics. However, the 26 and 52 multiple car rates are not a substitute with the single car or truckload service. Thus the railroads are using a combination of price competition and service differentiation to meet the truck competition to the Pacific Northwest.

Backhauls Resulting in Growth

Truck movement of building material, oil drilling pipe and casing and fresh fruit and vegetables from the west coast to the Upper Great Plains and Midwest results in trucks seeking backhaul opportunities to the west coast. Hard wheat from North Dakota and Montana have provided that opportunity and has made this particular truck movement much more economically viable. Wheat as a backhaul has been a very positive factor in the growth of the truck movement of wheat to the Pacific Northwest. A high percentage of loaded miles will probably be necessary in the future for truckers to maintain economic viability in this move. The reason is that trucks cannot compete cost wise to head with railroads. Alternatively it is very difficult, almost impossible for railroads to compete with trucks if they are loaded both ways. Thus truckers will have to seek backhauls or fronthauls if they wish to remain competitive with lower multi car rates.

Energy Costs

Increasing costs of energy particularly diesel fuel has a special significance for trucking firms who are competing with railroads for the same agricultural commodities. Trucks are a more fuel intensive mode than railroads in the point to point transportation of bulk agricultural commodities. Thus as diesel fuel prices increase truck costs will increase faster than rail costs. If diesel costs do spiral it will create an anti-competitive barrier for trucks making it very important for them to minimize deadheading.

Railroad Future Pricing Strategy

The growth of trucking of exempt commodities in both the relative sense and the absolute sense has been significant in the late seventies. This growth translates into a revenue loss for the railroads as long as they have excess capacity which they currently have. Thus it is safe to assume that the railroads will make an effort to attract that traffic now moving by truck back to the rail mode. The railroads have at least two methods by which they can try to achieve this.

Traditionally the railroads have implemented some form of price competition to regain traffic lost to the truck mode. That is they have lowered their rates down to the level of truck costs, making it unprofitable for trucks to operate. The railroads will continue to base their rates on long run truck costs in truck competitive areas in the future.

The railroads will also try and differentiate rail service from truck service in the future. An example of such differentiation is the multi-car wheat rates introduced westbound. Every bushel of wheat that moves under a multiple car rate is a bushel that more than likely will not be available for a truck or single car move. To the extent that they can differentiate service they can create some captivity, especially if multi-car method of merchandising becomes the preferred method.

Thus the railroads long run pricing strategy will be to price according to long run truck costs and they will attempt to differentiate truck service from multi-car rail service.

Railroads may temporarily abandon this strategy in the short run when transportation shortages occur and then return its long run strategy when shortages disappear. This will occur as a result of the Staggers Act.

The Staggers Rail Act will also allow the railroads to adjust their rates to meet both truck and barge competition quicker than before without fear of the rates becoming permanent. Thus railroads will be more aggressive than in the past in meeting inter-modal competition from truck and barge.

Conclusion

The growth in trucking in North Dakota of exempt agricultural commodities have been significant during the late seventies. This growth represents a profitable revenue loss to the competing rail-

roads. The railroads will reduce rail rates to truck cost levels and introduce new types of services in the form of multi-car rates to recapture this lost traffic. Trucks will have to maintain back-hauls and minimize deadheading to maintain traffic levels achieved and to remain economically viable.

AN OVERVIEW OF AGRICULTURAL TRUCKING IN NORTH DAKOTA AND THE NATION*

Ken Casavant*

Being the summary speaker at a seminar is always a bit risky since it is always possible that the previous speakers would not have offered anything worthy of summarization. That is certainly not the case today because all four previous speakers have produced such thoughtful material; so much so that a summary and highlighting of the material may be useful.

As we evaluate and review today's activities, let's remember two general thoughts that should pervade any discussion of agricultural trucking and the future of that industry. First, transportation is useless in and of itself! It is a classic example of a derived demand since it is only desired for the services it provides to the product being transported, namely time and place utility. Thus, truckers and truck firm managers must look to what commodity needs to be moved, where it has to go, and how valuable the transportation service is to that product.

Secondly, it is important to remember that there is no such thing as an exempt trucker! The commodity, due to its agricultural exemption, can be moved by motor carriers without concern of rate or route regulation but the trucker isn't exempt, the commodity movement is. This distinction becomes even more important as the regulatory environment continues to change under the Motor Carrier Act of 1980 and the recent Staggers Act.

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*Professor of Agricultural Economics at Washington State University, Pullman, Washington.

Now, let's review and evaluate the four independent presentations while looking for interdependent themes among them.

Wes Wilson led off with a presentation emphasizing characteristics of the North Dakota trucking industry and then offered some cost and management related information. The survey conducted by the Upper Great Plains Transportation Institute revealed that trucking has been growing in North Dakota and increases in firm size are occurring. The truckers are heavily located in the eastern part of the state and the largest firms have been the most active in volume. Firms have been quite stable, especially larger firms, and these larger firms have longer hauls and higher backhaul percentages, suggesting a cause and effect relationship may be apparent. It further appeared that larger firms have been able to achieve lower costs of operation than smaller trucking firms, even though the same annual mileage per truck is attained by all sizes of firms. The theme of these characteristics is not "if my trucking firm isn't large, I can't compete". Rather, it indicates that opportunities for improvement in backhaul and costs of operation are available to the progressive and successful trucker.

Wes then introduced a mechanical means to identify costs of operation by the trucker, providing information for appropriate managerial decision making. He developed this cost analysis on a total, variable and out-of-pocket cost grouping, allowing him to move into the third section of his talk, the relationship between costs and rate making decisions. Wes then showed the effect of backhauls on costs and rates needed to cover these costs; the effect of seasonality

on rates or pricing decisions; and then reviewed how this cost information might be useful to truckers in establishing "rate floors" or negotiating rates with elevator managers.

Bill Thoms then gave a review of the truck deregulation in the Motor Carrier Act of 1980 that has recently been undertaken and, even though he didn't specifically use the word, spoke of opportunities for agricultural truckers. He first gave an historical perspective on the birth and rationale of regulation, specifying a category of types of carrier by authority arising under regulation. Opportunities for small businesses, in this case trucking firms, were presented; broadened exemptions for fish, seed, feed, plants as well as the increased percentage of regulated commodities allowed to cooperatives for haulage were enumerated. Liberalized entry into carriage of regulated products was realized by changing the burden of proof to the protestant firms. Rate flexibility was also increased. In summary, Bill pointed out that backhaul opportunities exist because of increased exemption categories, easier ease of entry, and the apparent (thus far) willingness of the Interstate Commerce Commission to allow the legislative intent of the Motor Carrier Act to be realized.

John Finsness then spoke of recent rail deregulation and suggested it could be both an opportunity or problem to truckers in North Dakota. He initiated his remarks with his perspective of the philosophical reason for regulation, then presenting the structure and implications of the regulation changes. Rates can now be increased by railroads faster and easier than previously. Market

dominance or "captivity" definitions may allow rates to be set by competition. Railroads generally have more flexibility in issuing contracts but the vagaries of weather may not allow country elevators to participate. Rail line abandonment, which is and will continue to be extensive in North Dakota, may offer an opportunity to truckers, opportunity for short haul feeder movements to replace the long haul carriage lost to the railroads due to multiple car or unit train rates. Finally, John pointed out the potential movements available to truckers if new Minneapolis barley rates are attained through presently ongoing litigation.

The final speaker, Gene Griffin, gave a broad look at the growth of agricultural trucking in North Dakota. The motor carrier share of grain and oilseed movements has significantly increased over the past six years, although a slight decrease has been seen in the past eighteen months. It appears this growth arose because of the lack of available railroad equipment accompanied by the strong increase in sunflower production in the state. Gene pointed out the noticeable differences in modal share by commodity and port area and he offered some tentative reasons for these differences. Finally Gene analyzed the motor carrier's relative and absolute volume in reaction to rail rate changes and energy cost shifts. He continually emphasized the fact that truckers can still respond quicker than rail to new demand, geographically or temporally.

Let me now turn to some general thoughts about North Dakota and national motor carrier issues. I do believe that unit trains and

multiple car rates will cause extreme competition for long haul movements but that this restructuring of the marketing process will result in new but different opportunities for trucking firms.

In North Dakota, truckers can no longer afford to be only truck drivers or labor! It is possible the relaxed common carrier obligations of regulated carriers may increase backhauls available to agricultural truckers in rural areas. These backhaul possibilities mean a need for brokerage or consolidation of loads may become even more apparent. It is reasonable to expect that the progressive elevator manager may serve this function, generating loyalty from truckers and opportunities for moderate rates on fronthaul and backhaul.

Finally, it is necessary to remind ourselves that the agricultural trucker is not disappearing, either in North Dakota or in the United States as a whole. Our studies indicate some geographical and commodity specialization shifts are occurring but generally the industry is viable and balanced.

At the national level it should be pointed out that truck-barge movements are increasing and river houses are being built to accommodate this traffic. But, the future of this movement is cloudy due to energy costs, user fee impacts and competitive reaction of the railroads.

Another area of concern is the issue of user fees on highways occasioned by various cost responsibility studies recently completed in Oregon, Wisconsin and several other states. The studies found that while trucks as a group are paying an appropriate share of main-

tenance and rebuilding costs of highways, the larger truck may not be paying its equitable share relative to damage caused to highways. This may well cause increased license and related fees for heavy loaded grain trucks.

State differences in weight and length laws decrease the effective carrying capacity of the motor carrier industry. However, until some form of state compensation or reciprocity is developed, some states or local governmental units will continue to be reluctant to relax their standards.

Finally, new legislation may be coming, legislation that may constrain the activities of motor carriers. The issue of lumpers may be resolved by internalizing inefficiencies rather than accepting inconveniences. Contracts might well be imposed on previously exempt fruit and vegetable truckers. In fact, if these "experiences in deregulation" don't appear to work, we could well lose our historical exemptions accompanying agricultural and bulk commodities. A thought to be remembered!

In summary of today's discussions, let me state to you truckers, "Manage, don't just drive!" and "Merchandise, don't rely on tradition." Management of the internal costs in your firm can increase efficiency just as merchandising of your services is necessary to increase revenue. Brokerage functions can be useful: the question is who will provide it, shipper associations, elevator managers, or the traditional truck broker?

So competition from other modes and changing institutional policies have and will continue to make <u>management</u> and <u>merchandising</u> even more important to truckers.