THE FUTURE OF WHEAT TRANSPORTATION TO THE PACIFIC NORTHWEST FROM NORTH DAKOTA AND MONTANA

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The Pacific Northwest ports serve as terminal markets and export locations for significant amounts of hard red spring and hard red winter wheat produced in North Dakota and Montana. The wheat movements to the PNW from this origin territory involve several modes; rail, truck and barge. What modes or combinations will dominate in the future movement of this commodity is a relevant and very important question when the expansion of barge and export facilities is being considered. The purpose of this paper is to speculate as to the nature of the future transportation of wheat to the PNW from North Dakota and Montana.

The central question regarding future wheat transportation to the Pacific Northwest is what will happen to truck competition. Currently trucks provide a significant portion of the transportation demand to the PNW. They also provide price competition to the railroads and amongst themselves. Several factors will influence this competition in the future.

Staggers Rail Act of 1980

Two provisions of the Staggers Act will probably affect the truck competition on wheat movements. The rate flexibility provided for in the act will allow railroads to react to truck competition more aggressively and quickly without interference from the ICC. Some believe this to be perceived rather than real and also that this could have taken place under the old legislation. This idea is supported by the fact that the multiple car and unit train rates on wheat to the PNW from North Dakota and Montana were docketed before the Staggers Act was passed by Congress.

However, if railroad management perceives that they now have more pricing prerogative than prior to the enactment they will become more aggressive in meeting all types of modal competition including trucks. An implicit assumption which is a necessary condition is that the traffic must be profitable before rail management will make an effort to direct it from other modes. Since the rail mode has a significant cost advantage compared to the truck mode in the long haul of bulk agricultural commodities this assumption should be no problem in the movement of wheat to the PNW from the origin territory in question.

Price competition can take several different forms and will probably be used in conjunction with some form of service competition in an effort to distinguish rail service from truck service. This will influence the degree of substitutability thereby increasing captivity to the rail mode while at the same time competing with trucks on the basis of price. An example of price and service competition being used in conjunction with one another and complementing one another is the multiple car and unit train rates implemented to the West Coast.

These rates were published for three reasons:

First and foremost - truck competition from Montana and western North Dakota was severely eroding the rail market share.

Secondly - the Burlington Northern had to meet Union Pacific competition in Kansas, Nebraska, Wyoming for Colorado. (Market competition)

Thirdly - the relationship between competing rate structures were getting out of whack because of general percentage rate increases.

The end result was a general reduction in rates and the implementation of multiple car and unit train rate concept. This rate structure should have the effect of tying the wheat traffic to the rail mode for two reasons. First of all the reductions will make railroads price competitive. (If not, nothing is preventing the railroads from further reducing their rates). Secondly, a movement in multiple car or unit train service negates a truck movement on a bushel for bushel basis.

The manner in which states regulate intrastate rates has been made uniform and in conformance with the Staggers Act as a result of the Staggers Act itself. This may influence wheat movement from Montana. In the past some grain has moved into subterminal market points such as Great Falls on the low intrastate scale of rates and has then been trucked to the West. Grain was also moved by rail on the intrastate scale to Great Falls and then beyond on point to point interstate rates, however, this is illegal and is currently being litigated. As a result state regulation in conformance with the Staggers Act low intrastate rates will probably be raised. It should be pointed out that this could be done under Section 13 of the old ICC act.

Backhauls

Most of the truck movement of wheat west from North Dakota is a backhaul. Some of the Montana grain is backhauled as well although it might be much less than North Dakota grain because of the short distance to Lewiston and Central Ferry from some parts of Montana. This would conform to economic cost theory which suggests that trucks are more cost competitive than rail in the short haul because of the relative differences in terminal costs.

The headhaul (fronthaul) consists primarily of pipe (both drill stem and casing) for oil and gas exploration and development, building materials (mostly lumber), some steel and some produce. Fresh fruit and vegetables are a large portion of the headhaul which provide backhauls out of Great Falls.

One means that the railroads will use in the future to attack the backhaul is to compete with the headhaul since it is very difficult to compete with a backhaul. Theoretically in the short run the revenue for a backhaul only has to exceed the truckers marginal cost attributable to the lading before it is economically feasible to handle a backhaul. Since the marginal cost is generally minimal the rate that a truck could theoretically charge would be extremely low relative to rail costs for the same movement. This is an incentive for railroads to divert the headhaul from truck to rail thereby eliminating much of the backhaul competition.

Change in Burlington Northern's Management

A change in BN railroad management will probably also affect future wheat movements to the PNW and Columbia-Snake complex in the future. As a result of the merger with the Frisco, R. C. Grecian, past president and chairman of the board of the Frisco, has been named president and CEO of the BN railroad company. The result of this change is speculative but I personally believe the BN will become much more aggressive in the future regarding all types of intramodal and intermodal competition.

BN Holding Company

BN has recently formed a holding company headquarters in Seattle with the railroad being a separate entity within the holding company. The implications of such a structure is that the railroad is going to have to become more profitable to compete for the scarce capital resources of the holding company. This should result in more aggressive management and possibly influence truck competition of wheat to the West.

Multiple Car and Unit Train Rates

Although the multiple car and unit train rates were treated in an earlier section the subject deserves further discussion. As was mentioned earlier the multiple car and unit train concept is a service concept in conjunction with a reduced rate. Every bushel or hundredweight of grain shipped in multiples or unit trains negates a movement by truck thereby tying it to the rails. Furthermore as country elevators build or modify facilities to handle multiple car and unit train shipments they become somewhat locked into the rail mode.

Another factor is marketing efficiencies associated with larger sales of grain. If such efficiencies do exist and price advantages are gained by making sales in multiple car and unit train lots of wheat, this further encourages the use of such a rate structure.

Inflation and Truck User Fees

Inflation will affect the movement of wheat west from North Dakota and Montana in several ways. Energy inflation will continue to make trucks less competitive vis-a-vis railroads in the long haul movement of bulk agricultural commodities because trucks are a more energy intensive mode in such a movement. This should influence diversion of traffic to the rail mode.

Continued inflation of road construction and maintenance costs will also influence modal competition. As costs increase overall user fees may increase. Furthermore, it is possible that government may shift a larger burden of the user fee to the trucks from the automobile in the near future.

Motor Carrier Act of 1980

As a result of the Motor Carrier Act of 1980, truck entry into regulated movement is easier, backhauls for crops increased and more commodities are exempted. This is a positive factor in the truck movement of wheat. To the West, however, I think it will have little impact because the imbalance of traffic is so great and the truck headhauls that provide for a wheat backhaul that can possibly exist are already being made.

Conclusion

The truck movement of wheat from North Dakota and Montana to the Columbia-Snake and Pacific Northwest will probably decline and shift to the rail mode in the future as a result of institution of multiple car and unit train rates, more aggressive BN management, formation of BN holding company, inflation, and the Staggers Rail Act. However, it may be difficult if not impossible for the railroads to root out all truck competition because of the economics of backhauls or short hauls from certain sections of Montana.