

**A CRITIQUE OF BURLINGTON NORTHERN'S  
PRIVATE CAR POOL PROPOSAL**

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## Introduction

To get things into perspective it is useful to know: (1) what the railroads have, and (2) what the grain shippers (country elevators) have. Based on the last three crop marketing years (i.e., 1979-80, 1980-81 and 1981-82), the railroads have shipped an average of 280 million bushels of grain from North Dakota annually. Railroads are currently able to supply adequate numbers of covered hopper cars to country elevators. In fact, the Association of American Railroads (AAR) has reported average daily supply/demand balances in excess of +20,000 cars per day for most of 1981 and 1982. Other than spot equipment shortages, the railroads' overall fleet capacity has been adequately meeting grain shippers' requirements during the past two and one-half years.

## Grain Shippers

Almost one-third of the country elevators operating in North Dakota in 1980 leased covered hopper cars (survey by Griffin and Casavant, 1980). A follow-up survey (Ming, 1981) revealed that these firms\* leased an average of seven covered hopper cars per elevator. Based on data supplied by the survey respondents an "average" number of shipments per leased car can be calculated. This figure was calculated to be 18.4 shipments per hopper car per year. Based on the above figures, the capacity of the private covered hopper car fleet in North Dakota can be calculated as:

$$FC = L * NC * S * HC$$

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\* Questionnaires were sent to 175 firms. Three mailings resulted in 50 responses.

where: FC = fleet capacity (in bushels)

L = Number of lessees

NC = Average number of cars per lessee

S = Average number of shipments

HC = Hopper car capacity

thus:

$FC = 175 \text{ lessees} * 7 \text{ cars} * 18.4 \text{ shipments} * 3,200 \text{ bushels}$

$FC = 72,128,000 \text{ bushels}$

The 72 million bushel capacity of the private covered hopper car fleet in North Dakota represents about 25 percent of total annual rail grain shipments. Or, stated differently, grain shippers in North Dakota have the capacity to ship one out of every four rail bushels in privately owned equipment.

#### BN Policy

Burlington Northern has initiated measures to reduce the number of privately owned covered hopper cars operating on its trackage. In mid-1982 the railroad limited private covered hopper car compensation to 24¢ per loaded mile regardless of type of service. Prior to this time (mid-1982) BN restricted only multiple car movements to 24¢ per loaded mile, but paid higher mileage credits (at the time up to 39.45¢ per loaded mile) for single car movements. Currently, the ICC allows railroads to make mileage credits up to 54.6¢ per loaded mile.

Burlington Northern is currently considering an alternative policy regarding the use of private covered hopper cars. Under terms of this policy BN

will create a "pool" of railroad owned and privately owned covered hopper cars. The pool is to be managed by BN. The number of private cars to be included in the pool, as well as the size of the pool, will depend on the demand for rail transportation of grain. It is obvious BN will increase the size of the pool during peak demand periods and decrease the size during off-peak periods. In order to attract private cars into the pool, BN will solicit "bids" from private car owners and lessees. BN will select those cars for which bids are the lowest. In other words, if BN wants to include 50 private cars in the pool and 100 are offered, the 50 cars with the lowest corresponding bids would be entered. It is BN's intention not to allow private car useage for those cars that are not included in the pool. Burlington Northern intends to control the size of the fleet, to some extent, by varying the terms of the leases. Comparatively speaking, the lease terms will be either short, intermediate or long term in nature. Thus, BN will attempt to maintain a dissonant number of privately owned cars in the pool at all times.

#### Theoretical Relationships

Burlington Northern's proposed policy may be analyzed theoretically and hence, graphically (Figure 1). Let S represent the supply curve of those firms that will supply privately owned equipment to the pool.  $D_1$  and  $D_2$ , respectively, represent "normal" and "peak" demand periods (i.e., the demand for transportation). The analysis is based on the following assumptions:

- (1) the firms are supplying a homogeneous product;
- (2) price rigidity;
- (3) BN's contribution to the pool is constant; and
- (4) rational firms.

Assuming a normal demand scenario ( $D_1$ ), the supply curve (S) intersects the demand curve ( $D_1$ ) at A. Thus,  $Q_1$  units will be provided. Point B represents a peak demand scenario. In this scenario, S intersects  $D_1$  at B. Thus,  $Q_2$  units will be demanded and supplied. The distance  $OQ_2 - OQ_1$  represents the additional number of units that must be provided to fulfill the increase in demand from  $D_1$  to  $D_2$ . The increase in demand ( $D_1$  to  $D_2$ ) is assumed not to affect the price of the transportation service. That is, price rigidity exists. In other words, the firm will supply more of its product at the same price.

#### Relationship to BN Policy

The theory presented in Figure 1 relates directly to BN's proposed policy on private car ownership. Foremost, creation of a pool would allow BN to maintain a stable fleet of railroad owned covered hopper cars. BN could make short-term adjustments in fleet capacity during peak demand periods by employing privately owned equipment in the pool. Conversely, through short-term agreements, BN could dispose of privately owned equipment during normal or off-peak demand periods. An effective pool would allow BN to maintain a base supply of equipment to accommodate long-term trends in grain movements and would allow short-term adjustments in fleet capacity to facilitate the inherent seasonality of grain shipments.

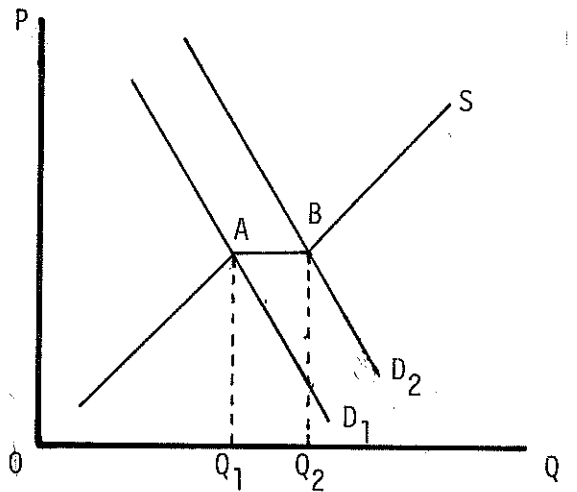


Figure 1.

The main drawback to BN of such a policy is the obvious short-term nature of the supply source. Most of the country elevators that would be supplying the equipment have relatively short terms remaining on their existing lease agreements. It is doubtful that many firms will renew lease agreements in the future since both railroad policy and erratic grain movements are making it difficult to earn adequate revenues on leased equipment. However, the short-term nature of the supply source is undoubtedly of little concern to BN since its main intention is to curtail the use of privately owned equipment.

#### Effects on Private Car Owners and Lessees

One of the most discernable effects of Burlington Northern's proposed policy on private cars is participation. BN has proposed that private cars not in the pool would not be allowed to operate. With the current surplus of rail equipment it is doubtful that all shippers would be able to supply hopper cars to the pool. Thus, many private cars would be forced to sit idle and incur substantial losses.

Firms that supply equipment to the pool may not be much better off. In all probability they would be only minimizing their losses. It is doubtful BN will enter into sublease agreements for the full price the lessee is paying (or else BN would lease directly from a car leasing company).

#### Conclusions

The policy proposed by Burlington Northern on private cars would create a pool of railroad owned and privately owned covered hopper cars. BN would call on private car owners and lessees to supply more or less cars depending on transportation demand. An effective pooling policy would allow BN to maintain a base investment in grain cars to cover long-term needs and make short-term adjustments to facilitate equipment needs during peak and off-peak demand periods. Few (if any) firms supplying cars to the pool would cover their costs. Further, firms that were unable to supply cars would not be allowed to use their privately owned equipment.