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AN INQUIRY INTO THE TRANSPORTATION PROBLEM OF WESTERN MONTANA

AND POSSIBILITIES OF ESTABLISHING A FREIGHT POOL CAR ASSOCIATION IN MISSOULA

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0. F. Rydell
B.S.C., University of Notre Dame, 1938

Presented in partial fulfillment of the requirement for the degree of Master of Arts.

Montana State University
1950

Approved:

Chairman of Board of Examiners

Dean, Graduate School

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CHAPTER I

TRANSPORTATION -- A VITAL PROBLEM OF THE WEST

Transportation is important to all sections of the nation because it is one of the basic economic factors involved in any society. Railroad transportation has a particular importance to the Pacific Northwest, which consists of Washington, Oregon, Idaho and Montana, since the bulk of this area's annual freight tonnage is carried by the railroads. It is also particularly important to the Pacific Northwest because railroad freight rates in this region are relatively high when compared to other sections of the country.

The purpose of this study is to analyze one of the possibilities of reducing the cost of railroad transportation.

There are two methods of approaching the problem of reducing railroad transportation costs. One method of approach would be to seek adjustments to the existing freight rates; the other would be to strive for economies under the present rates. The latter method is the one adopted in this study, specifically the possibility of obtaining savings by establishing a pool car association or some similar type of organization.

I. TRANSPORTATION'S IMPORTANCE TO THE DEVELOPMENT OF AN ECONOMY

As an indication of the importance of transportation to

our nation's economy, it has been estimated that the total cost of transporting goods in 1959 was 8.4 billion dollars. This was equal to 5 per cent of the value of the goods transported. This percentage, however, does not clearly indicate the cost of transportation to the consumer, since goods are sold and transported several times before they reach him. The total of all transportation costs to the consumer is estimated at 20 per cent of the retail price.

One of the economic principles advanced by Adam Smith was that transportation fixes the limits of the market, both physically and financially. This principle is certainly true today. The distance between two points is measured not only in miles, the physical element, but also in rates, the financial element. Frequently, the miles and the rates are the determining factors in the actual location of industries. Because of unfavorable freight rates, many communities are unable to expand in an economic sense because industries cannot be attracted to their particular district, even though they may be endowed with good natural resources. Other commodities, endowed with inferior resources, may grow rapidly because of the lower transportation costs.

To illustrate the effect transportation has on the location of industries, Converse and Huegy wrote:

Paul D. Converse and Harvey W. Huegy, Elements of Marketing, (New York: Prentice-Hall, Inc., 1949), p. 68.

Andrew Carnegie said that he located his J. Edgar Thompson steel plant at Braddock, Pennsylvania because here it was on the Pennsylvania Railroad, and near the B. & O. Railroad and the Monomgahela River.

specialization and transportation. Specialization, they state, results in a "greater variety and a greater quantity of goods," and "industrial progress consists very largely of finding new and better ways of production." Specialization, however, is limited by the extent of the market, and often depends upon the ability to send goods to distant points and offer them at attractive prices. These economists conclude that if specialization is limited by the extent of the market, it is equally true that the extent of the market is limited by the availability of transportation facilities. Applying this principle to the West, it is evident that transportation is one of the primary factors determining the region's economic development.

According to Wendell Berge, former Assistant Attorney
General in charge of the Antitrust Division of the Department
of Justice. "transportation is the lifeline of American econ-

²Ibid., p. 73.

Principles and Problems, (New York: Harper and Brothers Publishers, 1948) I, (third edition) pp. 126 ff.

omy."⁴ This writer points out that the primary causes for the comparatively slow development of the western states are the prevailing railway operations and the freight rate structure. "Space and distance," he states, "have dominated the lives of people in the West."⁵

II. RELATIVE IMPORTANCE OF RAILROADS AS CARRIERS

In a pamphlet entitled "You and Your Railroads", published during 1949 by the Association of American Railroads, the importance of rail transportation was presented as follows:

You yourself probably did not go into a rail-road freight house, and you may not have shipped or received a package of freight, but nevertheless in 1948 the railroads hauled for you--and for each other person in the United States--an average of nearly 12 tons of freight a distance of one mile for every day of the year.

This freight service which the railroads performed for you is equivalent to moving one ton for approximately the distance from New York to Seattle and then down to Los Angeles.

The above quotation, while it does indicate the quantity of freight handled by the railroads, does not disclose the <u>importance</u> of this quantity factor in relation to the

⁴Wendell Berge, Economic Freedom for the West, (Lincoln, Nebraska: University of Nebraska Press, 1946), p. 97.

⁵ Loc. cit.

quantity moved by other transportation agencies. The important position of the railroads in comparison with other means of transportation is illustrated in Table I.

Since World War II shipping by truck, water carrier and air transport has grown rapidly, and these services will enhance the transportation facilities available to western industry in the future. However transportation by air and water carriers have definite limitations. Air transportation is limited because of its relatively small freight capacity, and shipping by water carrier is restricted because of the natural limitation of waterways and because of the much greater time required for freight in transit. Fundamentally, the transportation problem in the West is the problem of the railroads, since these carriers still handle more than fifty per cent of the total tonnage. Rail transportation, therefore, will largely determine the conditions under which western industry will develop.

III. OUTLINE OF FREIGHT RATE STRUCTURE

Without making a detailed study of the freight rate structure and how transportation rates are established, the following information is presented as a background in order to understand better some of the problems involving the western railroads and possible solutions to the problem of reducing transportation costs.

TABLE I

PERCENTAGE DISTRIBUTION OF TONNAGE AND REVENUE TON-MILE AMONG CARRIERS*
1939

	Per cent of Total Tonnage	Per cent of Revenue Ton-Mile
Railroads	52	7 0
Highways	18	8
Waterways	21	18
Pipelines	9	4
Total	100	100

^{*}Berge, op. cit., p. 104

The United States is divided into three principal class-rate territories, namely, Official or Eastern, Southern, and Western. Approximately 72 per cent of the geographical area of the country is included in the Western section. The Western section is subdivided into three areas: Western Trunk Line, Southwestern, and Mountain Pacific. (Figure 1.) Roughly 56 per cent of the total miles of track of Class I steam rail-roads in the United States is located in the Western territory.

Discussing the freight rate structure, it is essential to distinguish between class rates and commodity rates. Class rates constitute a more or less integrated rate structure throughout the country. Tariffs called "classifications" list almost all conceivable commodities and classify them into a number of groups. Class rates are usually considered as the general rules, commodity rates as the exceptions. Commodity rates are specialized rates developed to cover movements of individual commodities or groups of commodities between particular points. Commodity rates are generally lower than class rates and they apply usually on heavy goods shipped in large quantities, such as coal, cement, sand and iron.

Stuart Daggett and John P. Carter, The Structure of Transcontinental Railroad Rates, (Publication of the Bureau of Business and Economic Research, University of California: Los Angeles: University Of California Press, 1947), pp. 5 f.



PRIMARY RATE CLASSIFICATION TERRITORIES IN THE UNITED STATES

Class rates are based on percentages of a stipulated first-class rate which represents 100 per cent. Articles shipped are assigned a rating. A percentage of the first class rate is applied to all articles shipped in the three principal classifications territories. An item which comes under the class rate category is classified and the rate is thus determined. Commodity rates are fixed rates published to apply to specific articles.

The Interstate Commerce Act of 1887 created the Interstate Commerce Commission for the purpose of regulating interstate commerce. It is frequently thought that this commission makes and controls all freight rates charged by the railroads. New rates are usually established at the request of the railroads through their various traffic associations, and the Interstate Commerce Commission merely approves these rates for use and publication in freight tariffs. In accordance with this procedure, the commission has a control over rates but not the power to make new rates.

IV. EVIDENCE OF HIGH TRANSPORTATION COSTS IN THE WESTERN AREAS

Many Montana business men have made comments in recent years to the effect that the industrial expansion of Montana has been greatly impeded by the high cost of transportation. In 1949 the Bureau of Business and Economic Research at Montana State University assembled and summarized reports of

alleged cases of freight discrimination. The report concluded that these cases indicated discriminatory freight rates and recommended that a thorough study be made by a freight rate expert.

Under the present system of rate making, the West and South strongly object to the manner in which the ratings and classifications are actually applied. Traffic moving into another classification territory, for example, from the Southern Territory into the Official Territory, generally come under a single classification. That is, at the point of shipment in the Southern Territory the item is classified, and as it moves into the Official Territory the item usually retains its original classification, but the ratings on the listed commodities are not uniform in all territories. A low rate may be applied in the Official Territory, while rates are higher in other territories.

To illustrate this point, if it is assumed that the Official Territory class ratings are at a level of 100, a comparison with the other territories would produce the following relationships: 7

⁷Ratings in Consolidated Freight Classification No. 15, effective March 17, 1942, as tabulated in I. C. C. Docket 28310, Exhibit 42, cited by Wendel Berge, op. cit., p. 107.

Territory	Level
Official	100
Southern	137
Western Trunk-Line	146
Southwestern	161
Mountain Pacific	171

Such differences in territory ratings constitute one of the main disadvantages of the West, and one of the principal reasons for the slow development of this region. Class-rates generally apply to manufactured goods, and these rates are much lower in the Eastern or Official Territory. Though the West is the source of a great many raw materials and natural resources, industry has tended to remain in the East where it obtains lower transportation costs.

The importance of the variance of class rates among the different classification territories may best be illustrated by specific examples of the cost of shipping an item between two points. Such comparisons are presented in Table II and Figure 2, showing the higher rates for comparable hauls from points located in the high rate classification territories.

In order to make a comparison of rates involving Montana transportation, efforts were made to secure rates from various points of origin that would be a similar distance to a point of destination in Montana, as to some other points of

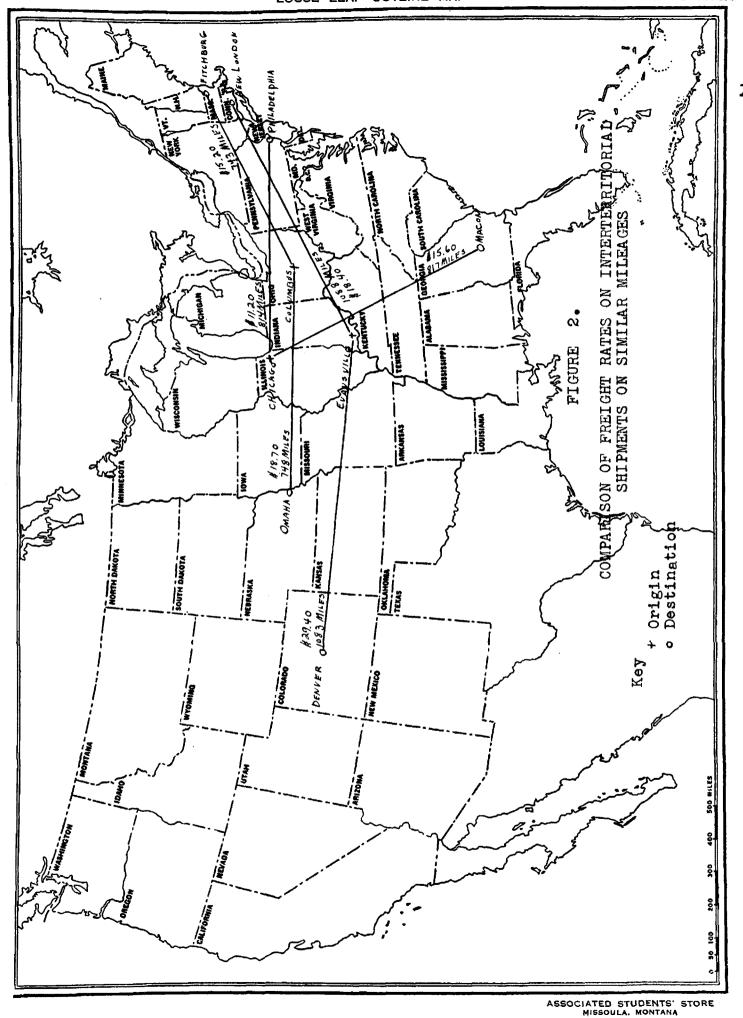
TABLE II

COMPARISON OF FREIGHT RATES APPLICABLE TO WORK CLOTHING IN CARLOAD LOTS BETWEEN VARIOUS POINTS OF ORIGIN*

Point of Origin	Destination	Miles	Rate Per 1,000 Pounds
a. Macon, Georgia	Chicago, Illinois	817	\$15.60
Philadelphia, Pa.	Chicago, Illinois	814	11.20
b. Omaha, Nebraska	Columbus, Ohio	748	18.70
Fitchburg, Mass.	Columbus, Ohio	743	15.20
c. Denver, Colorado	Evansville, Ind.	1,083	29.40
New London, Conn.	Evansville, Ind.	1,088	18.40

^{*}Berge, op. cit., p. 108.

Note: Refer to Figure 2 for geographic presentation of the above information.



destination in the opposite direction. In this manner rates in different classification territories are shown. Rates in Table III were obtained through correspondence with the Chicago, Burlington & Quincy Railroad Company, and through direct contact by personal meetings with representatives of the Northern Pacific Railway Company in Missoula.

The commodities listed in Table III were selected at random in order to obtain a fair comparison. In every case these differences in rates indicate that the cost per mile is considerably higher for shipments hauled into Montana than for the same items being hauled a similar distance in the Official Territory.

V. JUSTIFICATION FOR RELATIVELY HIGH RAILROAD RATES IN THE WIST

An employee of the Northern Pacific Railway Company summed up the reasons for the high cost of transportation in the West in this manner:

Transportation rates are established and based on the element of population. That is, where a particular area is made up of a dense population, the transportation rates are lower than in an area that is sparsely populated.

Another Northern Pacific Railway employee presented his opinion in a slightly different manner. He stated that transportation rates are based on volume of business handled. The greater the volume, the lower the rate per mile.

TABLE III

COMPARISON OF CARLOAD FREIGHT RATES FROM SPECIFIC POINTS OF ORIGIN TO MONTANA DESTINATION POINTS AND TO DESTINATION POINTS IN THE EASTERN CLASSIFICATION TERRITORY

Point of Origin	Destination	Commodity	Miles	Carload Rate Per 100 Pounds
Clinton, Iowa	Billings, Mont.	Farm Mach- inery	1,197	\$1.91a
Clinton, Iowa	Boston, Mass.	Farm Mach- inery	1,185	1.46b
Kinneapolis	Billings, Mont.	Flour	883	.865a
Minneapolis	Pittsburgh, Pa.	Flour	868	.54b
Minneapolis	Billings, Mont.	Roofing Material	883	1.38ª
Minneapolis	Pittsburgh, Pa.	Roofing Material	868	.82b
Des Moines, Ia.	Billings, Mont.	Farm Mach- inery	1,153	1.918
Des Moines, Ia.	Philadelphia Pa.	,Farm Mach- inery	1,174	1.48b
Mædison, Wis.	Billings, Mont.	Plumbing Supplies	1,160	3.03a
Madison, Wis.	Boston,	Plumbing Supplies	1,138	1.73c

aw. S. Hoppe, Rate Clerk, Northern Pacific Railway Company, Missoula

bR. E. Barr, General Freight Agent, Chicago, Burling-

ton & Quincy Railroad Company, Chicago, Illinois

CH. A. Gunderson, Freight Traffic Manager -- Rates, Chicago & Northwestern Railroad Company, Chicago, Illinois

Note: Refer to Figure 3 for geographic presentation of the above information.

Both of these opinions are based on the same reasoning. Higher population density leads to a larger volume of freight. Greater volume, resulting in lower fixed costs per unit, means lower transportation costs.

The economic problem of the West is succinctly outlined by comparing data for fifteen western states to total for the United States.⁸ These fifteen states can claim:⁹

50% of the land area

14% of the population

8% of the factory employment

10% of the value of factory production

The above percentages were applicable during 1939, the last

"normal" year before the war.

Mr. R. F. Bessey, Consultant for the National Resources
Planning Board, reducing these percentages to the Pacific
Northwest, pointed out that the population is less than 3 per
cent of the total population of the country, and yet the
region comprises over 13 per cent of the national land area. 10
Table IV is included for a more detailed distribution of the
population and area of the Pacific Northwest. With a lower

⁸Berge, op. cit., p. 14.

The fifteen western states are: Washington, Oregon, California, Nevada, Idaho, Montana, Wyoming, Utah, Colorado, Arizona, New Mexico, North Dakota, South Dakota, Nebraska, and Kansas.

Ransas.

10R. F. Bessey, The Economic Assets, Possibilities and Problems of the Pacific Northwest, (Report of the Pacific Northwest Regional Planning Commission), pp. 1 f.

TABLE IV

PERCENTAGE OF POPULATION AND LAND AREA OF THE PACIFIC NORTHWEST STATES TO THE TOTALS FOR THE UNITED STATES*

State	Population	Percentage	Area	Percentage
Montana	559,456	.425	147,138	4.87
Idaho	524,873	.399	83 ,5 57	2.76
Oregon	1,089,684	.828	96,981	3.21
Washington	1,736,101	1.319	68,192	2.25
Total	3,910,204	2.971	395,868	13.09
Continental				
United				
States	131,669,275	100.000	3,022,387	100.00

Note: Population figures are based on 1940 census.

^{*}Rand McNally Commercial Atlas and Marketing Guide, (seventy-eighth edition, New York: Rand McNally and Company, 1947), pp. 121-427.

volume of freight traffic than other parts of the country, because of the sparse population and longer freight hauls, it
is to be expected that transportation costs would be high in
these particular states.

In addition to population, there are other factors that have an important bearing on transportation rates. The authors of a recent study of the Pacific Northwest made the following comments on freight rates:

Although rail, water, air and road facilities [in the Pacific Northwest] are as good as in other parts of the United States, distances between centers of population are great, the topography unfavorable, and transportation costs consequently high. In addition, the relative lack of diversified, large movements of commodities places the Northwest in a disadvantageous position with respect to rail tariffs of other regions. On a tonnage-mile basis the inter- and intraregional rail rates are the highest in the nation. Il

Freeman and Martin also state that the foremost problem that confronts all carriers serving the Pacific Northwest, and especially the railroads, is that of insufficient freight for the available facilities. As evidence of insufficient freight for the four east-west transcontinental railroads serving this area the following figures were given: 12

west, (New York: John Wiley and Sons, Inc., 1943), p. 458.

12 Ibid., p. 432.

Revenue Freight Moved	
Northeast railroads	Tons per Mile 2,000,000
Southern railroads	1,700,000
United States Average	1,500,000
Northwest railroads	1,000,000

The tonnage per mile for the northwest railroads is far less than for railroads in other sections of the country. As a result, these authors conclude, transportation costs will necessarily be high until the traffic density is improved through increased development of the region's industries.

High costs of transportation are emphasized in the 62nd Annual Report of the Interstate Commerce Commission which stated that freight revenue per ton per mile increased 44.2 per cent between June 30, 1946 and August 21, 1948. This report pointed out that the level at the latter date was the highest since the creation of the commission in 1887. 13 However the railroads justify these high rates on the basis of the great increase in operating costs. The increase in revenue per ton per mile is still less than the general price level increase during the same period of time. The United States Department of Commerce has reported that the wholesale

¹³⁶²nd Annual Report of the Interstate Commerce Commission, November 1, 1948, (Washington, D. C.: United States Government Printing Office, 1949), p. 34.

prices for all commodities for this period increased 56.6 per cent. 14 This increase is 12.4 per cent greater than the increase in revenue per ton per mile.

United States Department of Commerce, Survey of Current Business-1949 Statistical Supplement, (Washington, D. C.: United States Government Printing Office, 1949), p. 28.

CHAPTER II

A POSSIBLE SOLUTION TO THE WESTERN MONTANA TRANSPORTATION PROBLEM

The Pacific Northwest Region must face this problem—
How can transportation costs be reduced? Perhaps in time,
through the combined efforts on the part of the general public,
the government, and the railroads themselves, the differences
in freight rates between the rate classification territories
will be eliminated, and the cost of transportation in all sections of the country will be equalized. This, however, will
not help Kontana at the present time.

I. CARLOAD SHIPMENTS

Douglas, Skar and Price offer several methods of reducing transportation costs, and one practice they advocate is buying in larger quantities to secure the carload rate rather than shipping under the less-than-carload rate. This method of purchasing in large quantities in order to obtain the more economical carload rate is one of the definite advantages enjoyed by large companies and organizations.

Lloyd V. Douglas, Robert O. Skar, and Ray G. Price, Modern Business--An Introduction to Principles and Problems, (New York: McGraw-Hill Book Company, 1948), p. 228.

The smaller companies are not usually in a position to buy in such large quantities, which would tend to tie up a much larger proportion of their working capital in inventories. The direct result of large inventories may also present a storage problem so that the added storage expense may more than offset the saving obtained by the carload rate. In addition there is the danger of inventory deterioration and obsolescense. In a community like Missoula, most of the business firms are too small to take advantage of carload rates by purchasing in carload lots.

II. CONSOLIDATED SHIPMENTS

Another method employed to obtain the benefits of the economical carload rate is the consolidating or pooling of shipments. Other cities in Montana have formed pooling associations or arrangements, such as those now operating in Billings, Butte and Great Falls. The Billings association has been operating for several years, and apparently it has been reasonably successful in obtaining savings in transportation costs for its members.

The principle of consolidated shipments is not complicated. In place of just one buyer and one seller as in the case of a regular carload shipment, a group of buyers and sellers make previous arrangements to have all merchandise directed to one point for consolidation. The individual orders

are held at this consolidating point until a sufficient quantity of goods has been accumulated to completely fill one freight car. The car is then loaded and released.

There are three general types of pool cars. The first two types listed below apply to cars that contain only one commodity, while the third type consists of cars containing more than one commodity.

The first type is the "straight pool car". This type car is loaded at one shipping point and is routed to only one point of destination. The freight rate charged for such a shipment is the carload rate between the two points.

This car is loaded at one shipping point but it makes several stops enroute for partial unloading. The rate on this type of pool car is also the carload rate from the shipping point to the final destination point, and in addition the railroads make a stoppage charge of approximately \$10.50 for each stop in transit. In effect, all the receivers at the various intermediate points pay a higher rate per mile, excluding the stoppage charge, than the receivers at the final destination point. One of the Northern Pacific rate clerks stated that frequently all receivers involved in a stop-in-transit pool car, prior to the shipment, enter into an agreement to prorate the total freight charges proportionately among themselves.

The third type is the "mixed pool car". A freight car of this type is loaded with merchandise carrying different freight classifications. The car is loaded at one shipping point and usually is routed to only one point of destination. The freight rate applied to a mixed pool car is known as the "all-commodity rate". An all-commodity rate is a low rate charged for shipping a full carload of items without regard to the classification of each item. It is of interest to note how this all-commodity rate became established. It came into existence as a result of the development of the motor carrier industry as a strong competitor of the railroads. At first the motor carriers, because of the high degree of competition in the motor carrier industry, did not segregate items into various classifications for rate purposes as the railroads did, but tended to charge a flat rate for a haul regardless of the value of the articles. practice, particularly on shipments of two hundred and fifty miles or less, caused a considerable amount of high valued articles previously handled by the railroads to be shipped by truck. In an effort to meet this form of competition the railroads altered their system of transportation charges and established a similar all-commodity rate.2

Principles and Problems, II, (third edition), p. 363.

III. PRIVATE POOL CAR COMPANIES

Many companies, for example, the National Carloading and Distributing Corporation and the Universal Carloading and Distributing Company, have been organized for the purpose of handling consolidated shipments. To illustrate the extent of the business done by these companies the following facts and figures are presented regarding the operation of the United States Freight Company (Delaware), which is the parent company of the Universal Carloading and Distributing Company.

The United States Freight Company³ has approximately 100 offices scattered throughout the country and the average monthly volume of freight handled is 100,000 tons, for over 100,000 customers. The gross operating revenue for 1947 was \$71,642,783 and for 1948 it was \$75,831,792. The net operating income for 1947 was \$1,641,793 which represented a \$5.48 earning of \$5.48 per share, and \$2,130,023 in 1943 or \$7.11 earnings per share. The company has 299,566 common shares outstanding. Of these 49.56% is held by the Linden Securities Corporation, which is affiliated with the New York Central Railway. These types of companies are recognized by

Moody's Investor Service, Moody's Manual of Investments--American & Foreign--Industrial Securities, (New York: Moody's Investors Service, 1949), pp. 1168 f.

law as freight forwarders are and regulated by Part IV of the Interstate Commerce Act.

The usual operations of freight forwarders consists of receiving merchandise from several points of origin, holding it for the time necessary to load full cars, and then forwarding the cars to the destination. Many of these companies maintain receiving and distributing facilities at various points of destination, thus providing a complete service of forwarding merchandise from the seller to the buyer.

IV. USE OF POOL CARS--BUYERS AND SELLERS

either the buyers or the sellers. A seller may use a pool car because he has found it to be the most economical method of shipping. For example, a large paper manufacturing concern located in central Wisconsin may be supplying dealers in Montana. Because Montana dealers are comparatively small firms, no one order is large enough to fill a freight car. In such a case, rather than make shipments immediately after orders are received, the manufacturer will hold the orders until the quantity to be shipped is equivalent to a full car. The shipment is then made in a stop-in-transit pool car.

The more economical pool car rates may also be obtained by groups of buyers in one locality. This is not an unusual practice where a town is located at a considerable

town may be located 500 miles from a supply center, and a great quantity of this town's purchases may be acquired from an area within a fifty-mile radius of the supply center. Without a system of combining orders, a large portion of the total purchases of this town would be shipped at less-than-carload rates. Through the operations of a pool car association, all purchases made within the fifty-mile radius would be routed to one freight forwarder located in the supply center. Here the merchandise is held until full cars can be shipped, with savings in transportation costs resulting from the application of the pool car rate.

This is the type of organization that is now operating in Billings, Montana. Great Falls recently established a similar organization. Refer to Figure 4 for a geographic presentation of the operations of the pool car association located at Billings, Montana.

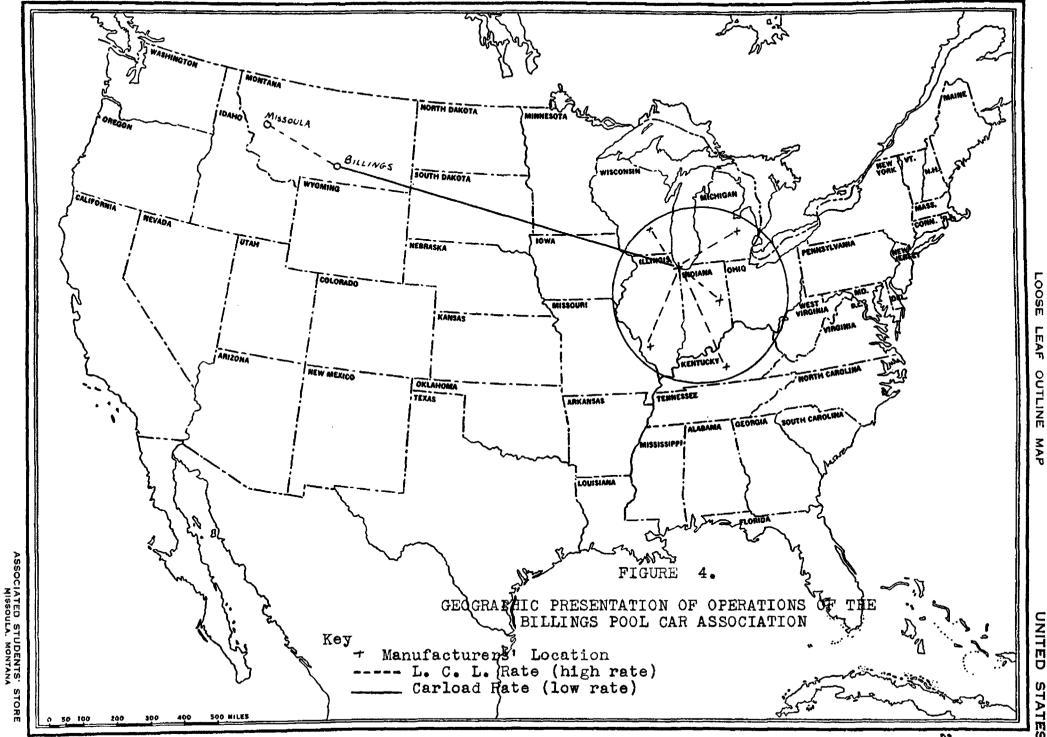
V. FURNITURE FREIGHT POOL OPERATIONS IN MISSOULA

The problem that confronts Missoula is to determine whether the solid line in Figure 4, representing car load shipments, could be extended to Missoula by the operation of a local pool car association in this city. However, before analyzing this particular problem, comment should be made on the present method used for transporting furniture to Missoula.

LOOSE

OUTLINE

MAP



For several years the furniture dealers in Missoula have been obtaining the benefits of lower freight rates by having shipments made in pool cars from Chicago and Los Angeles. Shipments from Chicago are handled through the facilities of the Chicago Furniture Forwarding Company, and shipments from Los Angeles are handled by the Furniture Manufacturers Association of Los Angeles. These companies are classified as freight forwarders but their activities are confined to the consolidation of furniture shipments. Such furniture pool cars, upon arrival at Missoula, are sidetracked to Reely's Storage and Freight Terminal and that company performs the final distribution to the various buyers.

The approximate quantity of furniture handled is reflected by the frequency of the shipments. During 1949 Chicago shipped one car every two weeks and Los Angeles released one car every two months.

No formal association is organized in Missoula for the shipments of incoming furniture. Representatives of the furniture dealers attend the annual furniture shows, conventions and displays, and frequently purchase their merchandise in these marketing centers. At the time of purchase, arrangements are made for the handling of pool cars through the services of the above mentioned freight forwarders.

Such an arrangement by the furniture dealers results in considerable savings in freight costs ranging from 30 to

50 per cent, as shown in Table V.

Assuming that one full car of furniture is shipped every two weeks throughout the year, the total freight costs for shipping in pool cars would amount to \$15,056.60. The same quantity of furniture shipped under the less-than-carload rate would amount to \$21,528.00. The total annual saving in freight costs accruing to the furniture dealers by using pool cars is \$6,471.40 or a saving of 30.06 per cent over the less-than-carload shipments. These figures are based on the minimum weight of 12,000 pounds per car as shown in Table V. Additional weight per car would increase this saving proportionately. It was estimated by one of the furniture dealers that under this pool car plan, the freight cost is approximately 10 per cent of the total purchase price of the furniture shipped. These pool car shipments result in an approximate saving of 3.91 per cent of the total cost of furniture purchased including the freight charge.

In a discussion with the manager of one of the larger furniture companies in Missoula, on August 10, 1949, the operations of the furniture pooling arrangements in this city were fully detailed. The procedure, as outlined by this person, is as follows:

The furniture dealers' representatives place orders with the manufacturers at marketing centers such as Chicago, or orders are placed by direct mail. At the time the orders

TABLE V

FREIGHT RATES ON FURNITURE SHIPPED TO MISSOULA MONTANA ON LESS-THAN-CARLOAD SHIPMENTS AND ON FULL CAR SHIPMENTS AND THE SAVINGS PER CAR ON CARLOAD RATES

Type of Rate	Rate Per Hundre Pounds	ed Freight Charge Total Pctg Including 5% & Freight of 3% Increasesb Savings ^c Svg	5
Less-than-carld.	\$6.38 (12,000) 3,63 (12,000)		
Carload	minimum)		06
Less-than-carld.	6.38 (15,000) 3.29 (15,000)		
	minimum)		39
Less-than-carld. Carload	6.38 (18,000 1 2.95 (18,000 1		
Carload	minimum		72
Less-than-carld. Carload	6.38 (22,000 I 2.68 (22,000 I		
our rodu	minimum		95
Less-than-carld. Carload	6.38 (30,000) 2.39 (30,000)		
Odi 10dd	minimum)		5 0

aPoint of Origin: Chicago, Illinois
bFreight rates have all been increased by a 5% emergency increase
which was granted to the railroads since the war due to higher
costs and the additional 3% increase represents the war tax
still in effect.

CAmount saved by shipping full car rather than partially filled cars.

dThese total charges include an additional .90 estimated charge per hundred pounds to cover the extra costs due to consolidating the shipments, such as the cost of the freight forwarder in the marketing center, the added insurance charge, and the cost of the local distributing agent at the destination.

Note: The above rates per hundred pounds were obtained from a rate clerk at the Northern Pacific Freight Office.

are placed, shipping instructions are given. These instructions direct the manufacturers to ship the furniture to Chicago in care of the Chicago Furniture Forwarding Company.

This company, having adequate facilities, stores the merchandise until there is a sufficient quantity to fill one car. However, no orders are held in Chicago over 30 days. In most cases, a full car shipment is sent direct to Missoula and occasionally a stop-in-transit car is released. The car is then side-tracked to Reely's Storage and Freight Terminal where local distribution is made.

Reely's Storage and Freight Terminal pays the railroad for the entire freight bill, which includes charges from the point of origin of the shipment to Chicago, the Chicago Furniture Forwarding Company's handling charge, and the freight charge from Chicago to Missoula. The Chicago Furniture Forwarding Company usually pays the freight charges from the point of origin to Chicago. The railroad, upon receipt of the payment from Reely's, remits to the Chicago Furniture Forwarding Company for the charge it had prepaid and also for its handling charge. In this case the railroad actually becomes the collecting agent for the freight for-The merchandise is then distributed and Reely's bill warder. all the dealers for their proportionate share of the entire freight bill plus its own handling and service charge. charges are prorated to the dealers according to the weight

of the items shipped.

This store manager concluded that the plan has operated very successfully and has reduced transportation costs, and that the only disadvantage is the delay in the shipment at the Chicago Furniture Forwarding Company while the merchandise is temporarily stored in order to accumulate the required volume for one freight car.

CHAPTER III

MAJOR CONSIDERATIONS RELATING TO THE ORGANIZATION OF A POOL CAR PLAN

In considering the establishment of a pool car association in Missoula many problems present themselves, and these will be outlined rather briefly in this chapter. Following chapters will include a more detailed discussion of these problems and possible solutions.

I. BASIC REQUIREMENT OF A POOL CAR PLAN

It is of primary importance that the prospective members in such an association clearly see definite savings in transportation costs resulting from the operation of a pool car plan. Unless a saving is apparent there will be no incentive to join the plan. In order to offer a reduction in transportation cost as an incentive for joining, it is necessary to make a thorough study showing the savings that will be effected.

II. IMPORTANCE OF QUANTITY

The quantity of goods handled by such an association is of major importance. Unless a basic volume with regular shipments is assured the plan cannot be successful. Therefore, before any savings can be calculated, at least the

minimum quantity of goods to be shipped must be known in advance. This factor of minimum quantity can only be determined by making an actual survey of the dealers and thereby obtaining an estimate of the monthly tonnage that could reasonably be expected.

This weight factor also has an important bearing on the one definite drawback in all pool car associations, that is, the delay in shipment as a result of the pooling arragements. Goods must be temporarily stored by a freight forwarder in a marketing center until 20,000 to 40,000 pounds of merchandise is accumulated. Preliminary conversations with a number of Missoula dealers revealed that apparently their main objection to a pool car plan was this delay in shipment. Many of them appeared to be comparing the proposed plan with a stop-in-transit pool car operated by a manufacturer, who made occasional shipments, causing considerable delay. also stated that generally they want to receive their merchandise as soon as possible, even at the cost of higher freight charges. Under present circumstances, many dealers are attempting to retain their inventory at as low a level as possible and thus reduce losses in the event of a decline in prices. This results in a greater number of relatively small shipments.

It is evident that pool car arrangements are bound to slow up delivery. Even if there were a sufficient quantity

of goods to ship one or more cars per day, there would still be time consumed in the handling of merchandise at the freight forwarders' loading docks, but the delay would not be significant.

There seems to be a diversity of opinion in Missoula as to whether local merchants can guarantee enough goods to ship one full car each week. The prevailing opinion appears to be that this is the minimum essential for the success of a pooling plan. Even if weekly shipments are made, the matter of delay may become an important element which would tend to discourage some dealers from participating in the plan. For example, assume that one full car is released weekly from the market center, and that a dealer placed an order with a manufacturer who shipped the merchandise to the freight forwarder. If the merchandise arrived at the forwarder's location just after the weekly car was released, it would have to be held for one full week pending the loading of another car. The maximum delay would be one full week, whereas if two cars were shipped per week the maximum delay would be only three or four days. This factor would be clarified by a survey to determine the volume of shipments by Missoula merchants. The estimated tonnage would indicate the approximate frequency of the shipments.

Another requirement for a successful pool car association is that the quantity of freight shipped must be consist-

ent throughout the year. At least a certain minimum must be shipped each month. A study would have to be made to determine the extent to which shipments are spread evenly over a twelve-month period. If a fair yearly distribution cannot be developed, the result might be longer delays between shipments at certain seasons, thus disrupting the individual merchant's program of marketing his products, and tending to discourage him from placing his orders through the association. Also the actual cost of transportation might be increased since a freight car not loaded to capacity, might be released by the freight forwarder and a full carload charge would have to be applied. A freight forwarder is not expected to act as a storing agent, and generally he does not have adequate facilities for performing a storing service. Therefore during the pool car association's low shipping periods, the freight forwarder would hold the merchandise for only a reasonable length of time, and then release it, ignoring the fact that a full car may not be shipped.

In reference to these important factors of quantity, delay, and consistency of shipments, one additional point deserves comment. It might be desirable to solicit merchants in the surrounding area to join the proposed plan. The addition of their shipments would aid considerably in overcoming the problems mentioned in this section. The question of including these outside merchants in the plan is given

further consideration in section IV of this chapter.

III. RATES

It may be stated that as a general rule all freight rates are class rates, and any other rate, such as the commodity rate and the all-commodity rate are exceptions to this general rule. Another exception to the general rule is the transcontinental mixing rule. Upon written inquiry to the Interstate Commerce Commission a letter received on August 13, 1949 from the secretary of the Commission defined the transcontinental mixing rule as follows:

Rule 10 of the classification authorizes a shipper to combine different commodities, if shipped to a single consignee at one destination, into a single carload and pay carload charges on the mixture based on the carload rate applicable on the highest classed or rated article in the mixture and the highest minimum weight provided for any article in the carload. Thus the shipper has the advantage of a carload rate instead of having to pay less-than-carload rates on the different articles in the car, which would apply in the absence of such a rule.

based on the highest class article in the car, the charge for the car is still lower than the total cost of shipping all the articles under the applicable less-than-carload rates. An all-commodity rate differs from the transcontinental mixing rule in that it establishes a flat rate per car between two points, and this rate does not fluctuate according to the

items in the car. Classification of the items in the car is completely ignored. The rate under the transcontinental mixing rule, on the other hand, may vary with each car, depending on the highest classified item.

In order to obtain an all-commodity rate a railroad must submit the proposed rate to the Interstate Commerce Commission and receive the Commission's approval before the rate may be published and put into effect. Before a railroad may submit a proposed rate to the Interstate Commerce Commission, however, two steps are necessary. First, there must be definite proof that there is a need for such a rate. In Missoula that proof probably could be established from information available from the proposed pool car association's records if they clearly indicated the need for such a rate because of the estimated tonnage to be shipped through the association. Second, the proposed rate would have to be approved by the major railroads operating in Montana and also by the Montana Lines Committee, which is an agent of the Western Traffic Association.

The traffic manager of a large department store in Missoula stated that an all-commodity rate of approximately \$3.40 has already been granted to Butte and Great Falls from Chicago, and that a rate of approximately \$4.55 has been granted to Spokane from Chicago. This traffic manager estimated that if Missoula applied for an all-commodity rate from

Chicago, and was successful in obtaining it, that the rate undoubtedly would be in the vicinity of \$4.00. This estimate was later mentioned to a rate clerk of the Northern Pacific Railroad Company and he was inclined to agree that a \$4.00 rate was a reasonable estimate. Under these circumstances, it would appear that the basis of any estimate in the saving in freight costs obtained by the operation of a pool car association using Chicago as the consolidating point, would have to be computed by applying a \$4.00 rate.

IV. POOL CARSPLANS AND THE INTERSTATE COMMERCE COMMISSION

In organizing such an association in Missoula, the type of company to be formed must be considered. One important element at this point is to determine whether the company would be obliged to conform to the regulations of the Interstate Commerce state Commerce Act. Under Part IV of the Interstate Commerce Act, freight forwarders are brought under the regulations of the Interstate Commerce Commission. Section 402 (a) (5) of this act reads as follows:

The term "freight forwarder" means any person which (otherwise than as a carrier subject to part I, II, or III of this Actl holds itself out to the general public to transport or provide transportation of property, or any class or classes of prop-

Note: Part I pertains to railroads; Part II to motor carriers; Part III to water carriers.

erty, for compensation, in interstate commerce, and which, in the ordinary and usual course of its undertaking, (A) assembles and consolidates or provides for assembling and consolidating shipments of such property, and performs or provides for the performance of break-bulk and distributing operations with respect to such consolidated shipments, and (B) assumes responsibility for the transportation of such property from point of receipt to point of destination, and (C) utilizes, for the whole or any part of the transportation of such shipments, the services of a carrier or carriers subject to part I. II. or III of this Act.²

Section 402 (c) reads as follows:

The provision of this part shall not be construed to apply (1) to the operation of a shipper, or a group or association of shippers, in consolidation or distributing freight for themselves or for the members thereof, on a non-profit basis, for the purpose of securing the benefits of carload, truckload, or other volume rates, or (2) to the operations of a warehouseman or other shippers' agent, in consolidation or distributing pool cars, whose services and responsibilities to shippers in connection with such operations are confined to the terminal area in which such operations are performed.³

Because of the above provisions, the type of organization formed and the extent of its activities would determine whether the plan would be subject to the regulations of the Interstate Commerce Commission. Exemption from regulation would have many advantages, such as greater freedom of operation, saving of time required to file the various periodic

²Interstate Commerce Commission, The Interstate Commerce Act-Revised to January 1, 1946, (Washington, D. C.: United States Government Printing Office, 1946), p. 198.

³Ibid., p. 199.

reports, and freedom from inquiry and review by the Commission's agents. It appears that the association would not come within the scope of the act, providing 1) it is formed on a non-profit basis for the purpose of obtaining lower freight rates, and 2) its operations are confined to Missoula.

As mentioned previously, the quantity of goods handled could be increased by including merchants and dealers from the surrounding area. However, if these outside merchants are included in the plan, the association would then come under the regulations of the act as provided for under Section 402 (c) (2). Even though the association would come under the Act, it may still be to the advantage of the association to include these outside members because their additional freight would not only increase the savings in total freight costs, but quicker service would result by reducing temporary delay at the consolidation point because of more frequent shipments.

V. DISTRIBUTION OF CHARGES

If a pool car association is established, a definite method must be developed for distributing the total freight charges and handling charges to the participating members. For example, assume that a full carload consisting of six or eight different types of merchandise is shipped from the forwarding point to Missoula. Each type of merchandise, if

it had been shipped separately, might fall into a different freight classification and thus would have required a different freight rate. The question now is how much of the total freight bill for the entire shipment should be billed to each recipient of the goods. It appears that the individual billings would have to be based on one of the following two methods. First, the billings to the members could be based on the total weight of each order and its relationship to the weight of the full car. The primary advantage of this method is that the computation of the individual freight bills would be a rather simple operation. However, this method has one definite drawback. It disregards the fact that some items may be large and bulky and require considerable space in the freight car and yet they may be relatively light in weight. Therefore the charge applied to these items would be comparatively small. At the same time other items may be small in size but heavy in weight, and thus be required to absorb a greater proportionate share of the total freight charge.

The second method is prorating the charges according to the relationships of the freight charges for each item if the items had been shipped separately. This method results in a more equitable distribution of the transportation costs, but the computation of the individual billings to the members becomes a rather complicated operation requiring con-

siderably more time.

VI. OPERATING EXPENSES

A study of the possibility of successfully operating a pool car association would not be complete without an analysis of the association's operating expenses. The success of the entire plan of consolidated shipments depends on whether the savings obtained by lower freight rates are considerably greater than the added costs incurred by shipping goods in this manner.

At least one person must be hired on a full-time basis by the association to handle its operations. This person must be familiar with the various freight rates and tariffs and classifications, and must have a good general knowledge of transportation in order to efficiently perform his duties as manager of the operation. Therefore the salary would have to be large enough to attract and hold a well qualified manager. Perhaps additional persons would have to be hired as the operations of the association developed and expanded. The costs of using the services of a freight forwarder in a marketing center also must be considered. Such costs would include a charge for the use of the forwarder's facilities and equipment, additional handling charges, and perhaps temporary storage, repacking and recrating charges. In addition to these costs, there would be the charges made by the

handling and distributing agent in Missoula. The cost of office space in Missoula for the association possibly could be eliminated as the local Chamber of Commerce has offered office space free of charge. Finally there would be the normal operating and maintenance expense of an office, such as costs of office supplies, postage, telephone, stationery and other similar expenses.

CHAPTER IV

ORGANIZATION AND FUNCTIONS OF THE BILLINGS SHIPPING
CORPORATION AND SUGGESTIONS FOR THE OPERATION OF
A CAR POOL ASSOCIATION IN MISSOULA

In an effort to obtain answers to some of the problems concerned with establishing a pool car association in Missoula, a meeting was arranged in Billings, Montana, with Mr. I. N. Early, secretary-manager of the Billings Shipping Corporation (this is the car pool organization in Billings), Mr. George D. Pendray, retired Northern Pacific Railroad freight agent, and the writer. This meeting was held in the office of Mr. Early on September 14, 1949. All the information in this chapter was obtained directly from that meeting.

I. HISTORY OF THE BILLINGS SHIPPING CORPORATION

Originally, the Billings Traffic Bureau was organized primarily to obtain improvements in transportation, such as lower rates, better service, improved routing, and savings in the time element involved in shipping. This bureau was financed by contributions from its members in the form of annual dues ranging from \$25.00 to \$100.00. The amount of these dues was dependent on the size of each company and the estimated amount of tonnage that it would ship through the bureau. Total annual dues contributed was approximately

\$2,500.00

One of this bureau's first projects was to establish a truck line between Sheridan, Wyoming, and Billings, Montana. After this bureau operated for several years, the traffic handled and the services rendered increased so rapidly, that a subsidiary company, the Billings Shipping Corporation, was formed.

The Billings Shipping Corporation was organized seven years ago for the purpose of obtaining cheaper transportation service to Billings by the operation of pool cars. Membership is restricted to wholesalers, and 66 wholesale firms are members at present. The other 18 wholesalers failed to qualify for membership, primarily because they also engage in some sort of retailing. To become a member of the organization, the wholesaler must make a formal application and this is used as the basis for determining eligibility. (Figure 5.)

This car pooling organization was formed as a corporation for the principal purpose of limiting each member's liability. Each member purchased one share of stock at \$10.00 per share. One share is the maximum amount of stock that may be owned by any one member. At the time of its incorporation, the Billings Shipping Corporation borrowed \$5,000.00 from the Billings Traffic Bureau. Therefore the initial working capital amounted to approximately \$5,500.00, consist-

APPLICATION FOR MEMBERSHIP

BIL	LINGS TRAFFIC BUREAU BILLINGS SHIPPING CORPORATION
	FIRM NAME
	ADDRESS
	BUSINESS
sal	ividuals, firms and corporations actually engaged in whole- e distributing business are requested to answer the follow- questions:
1.	List lines you distribute on wholesale basis in this ter- ritory. (five if possible)
2.	Percentage of business done at wholesale and percentage done at retail.
3.	Number of salesmen you have calling on dealer trade.
4.	Estimated number of carloads merchandise purchased direct from any manufacturer during a twelve month period.
5.	Do you belong to recognized national wholesale association. If so, state name of association.
6.	Approximate value of wholesale inventory.
7.	Location and size of warehouse and number of employees, other than salesmen.
	Signed
	Title
_	
Dat	0

FIGURE 5

ing of the \$5,000.00 loan and about \$500.00 from the sale of stock.

The Billings Shipping Corporation is a non-profit company, organized merely for the purpose of obtaining lower freight rates by consolidating shipments. It does not make any distribution of goods upon receipt in Billings, and as such, it is not subject to Part IV of the Interstate Commerce Act which regulates freight forwarders. Instead of performing a delivery service, the corporation has leased an unloading dock. As the freight cars arrive they are unloaded by employees of the corporation. The members are thereupon notified that their merchandise is on the dock and it becomes the members' responsibility to obtain their goods. Those members that do not possess their own trucking facilities make use of the services of a local transfer company at their own expense.

The Billings Shipping Corporation pays all the freight and handling charges, and subsequently receives reimbursement from the members.

II. EXTENT OF OPERATIONS

To give some idea of the extent of the business done by the Billings Shipping Corporation the following facts are presented: In 1948, 220 freight cars were received at Billings.
These cars made up a total weight of 7,431,686 pounds.

Of this total weight
4,224,193 pounds were shipped from Chicago
3,207,293 pounds were shipped from Minneapolis-St. Paul
Average weight per car was 33,780 pounds.

It was estimated that the total savings in freight costs in one year was approximately \$75,000.00 through the operation of consolidated shipments from Chicago and St. Paul. A specific example of this saving was given as follows: carload shipment from Chicago to Billings the regular rate is \$4.88 per hundred pounds for second class goods: the rate charged by the Billings Shipping Corporation to its members is \$2.90 per hundred pounds; thus a savings of \$1.98 per hundred pounds. This saving is realized by the members because of the comparatively low rate at which they are billed. This low rate is possible because the railroad's charge to the corporation is based on a carload rate which is even lower than the \$2.90 charge. The spread between the railroad's charge and the corporation's charge to its members is periodically adjusted by the corporation so that its operating expenses are recovered by collections from the members. In addition to this type of saving in freight costs, the Billings Shipping Corporation obtains savings by helping to bring about freight rate adjustments. Mr. Early stated that three freight rate cases are now pending, and that if favorable decisions are reached, savings in rate adjustments would amount to about \$25,000.00 per year. The Corporation also performs other types of service for its members, some of which are subsequently outlined.

The sixty-six members do not use the services of the Billings Shipping Corporation for their orders that are placed in carload quantities. These orders are placed directly with the various manufacturers and are routed direct to Billings under the prevailing carload rates. The Billings Shipping Corporation therefore handles only the wholesalers' less-than-carload orders. The general savings on less-thancarload shipments made through the services of the corporation are approximately sixty-five cents to \$1.25 per hundred pounds. It is also interesting to note that it is desirable to have a minimum weight of merchandise per freight car at 40,000 pounds, and that in some cases cars have exceeded 50,000 pounds. From Missoula's standpoint, it was suggested that shipments from the consolidating point should not be less than 30,000 pounds per car at the minimum, or the freight savings would be greatly reduced or even eliminated.

III. DISTRIBUTION OF CHARGES TO MEMBERS

Since the Billings Shipping Corporation is a non-profit organization, it attempts to bill freight charges to the individual members in such a manner that at the end of the

year the total revenue of the corporation is approximately equal to the total costs of transportation plus all operating expenses. In connection with this phase of the operations, the most important problem is to ascertain in advance what rates to charge the members so that neither a profit nor a loss results. Ordinarily all items transported are classified according to the type of goods shipped, as stipulated in the published tariffs and regulations of the railroads. More than 14,000 items are included in these classifications. In order to simplify the billing function of the corporation. Mr. Early's office has set up its own classification, and all items are classified as Class A, B, C, D, and E. After a detailed study of the current transportation rates, his office then determines the rate to apply to each individual class so that in the aggregate the total revenue will not result in a profit or a loss. A bulletin is then published and sent to all members showing the various rates. Whenever there is a change in the rates charged by the railroads, the rates of the Billings Shipping Corporation to its members must be revised accordingly. The rate bulletin is illustrated in Figure 6.

Mr. Early estimated that 90% of the goods received are classified in the A Bracket which represents all articles classified higher than fourth class in the Western Classification Territory, and the remaining 10% is mostly in the B

BILLINGS SHIPPING CORPORATION Offices at Billings Commercial Club

P. O. Box 2099
I. N. Early, Secretary-Manager

Telephone 2542 Billings, Montana

Bulletin No. 16, Cancels No. 15 Effective: September 1, 1949

The following charges include 3% Government Tax paid to Railway Co., also increase authorized by I.C.C. in Ex. 168-A, effective Sept. 1, 1949.

To Billings		From St. Paul	From Chicago
A Bracket B Bracket		3.25 2.20	4.10
*C Bracket	(Furniture)	3.10	3.75
D Bracket *E Bracket	(4th LCL Articles) (4th LCL	2.05	2.75

(Rates do not include pick-up and/or delivery charges)

CLASSIFICATION REQUIREMENTS

A Bracket: Articles classified higher than fourth class

(carload rating) in current Western Classi-

fication.

B Bracket: Articles classified fourth class (carload

rating) and lower in current Western Classi-

fication.

EXCEPTIONS

*C Bracket: Furniture classified third class (carload

rating) and higher.

**D Bracket: Rates will be charged on articles classified

4th class LCL when originating from points beyond Chicago, but will apply only when the inbound charges are assessed on the 4th class

LCL rates.

***E Bracket: MEETING MOTOR TRUCK RATES ST. PAUL ONLY:

Rates will be charged on articles classified

4th class LCL in current Western Classification.

LOSS AND DAMAGE

When shipment shows sign of loss or damage, it is necessary to call Western Weighing & Inspection Bureau to make inspection report.

EXTRA LABOR

Charges for extra labor will be made when heavy or bulky items require mor than normal time for handling.

FIGURE 6

Bracket. This is an important factor in the successful operation of the corporation in that the greatest savings in consolidating shipments results from shipments of goods in the
following order of importance: Class I, II, III, and IV.
The rate spread, that is the difference between the less-thancarload rates and the association's rates is the greatest on
the Class I items, and the spread decreases as the class number increases. The lowest savings is on Class IV items, which
constitute only 10% of the actual goods shipped. The relationship of rates applicable to these four major freight classifications and examples of articles that fall into each class
are as follows:

CLASSIFICATIO	<u> rates</u>	ARTICLES		
I	100%	Furniture; general household items		
II	85	Hardware		
III	7 0	Wall board; canned goods; wall paper		
IV	50% to 60%	Sand; bar iron; lime		

IV. OPERATING EXPENSES

The operating expenses of the Billings Shipping Corporation are an important factor, even though they would not be comparable to the expenses of such an organization in Missoula because of the type of service rendered. The Missoula organization would be established only for the purpose of consolidating shipments in order to obtain a reduction in

freight costs by the application of an all-commodity rate.

Perhaps at some later date it could undertake the additional services now rendered by the Billings association.

The Billings Shipping Corporation has grown rapidly and has expanded its functions well beyond the point of merely acting in the capacity of a consolidating agent. It now has five persons employed in the general office on a full-time basis at a total cost of approximately \$1,500.00 per month or \$18,000.00 per year. Mr. Early was unable to give an estimate of the other expenses such as stationery, supplies, telephone, traveling expenses and other ordinary costs of operation.

V. SPECIAL SERVICE--ASSEMBLING RATES

One of the important additional functions of the Billings Shipping Corporation is to furnish its members "assembling rates and information". Assembling rates consist of a complete detailed record of all the rates and routings of the important transportation companies between the various cities where the wholesale members purchase their goods and the consolidating points at Chicago and St. Paul. The consolidating agent in Chicago is the Crooks Terminal Warehouse located at 5817-5967 W. 65th Street, and the agent at St. Paul is the St. Paul Loading Terminal, Central Warehouse Company, located at 739 Pillsbury Avenue. It required sever-

al years to accumulate all the necessary data for this assembling rate file. A similar service could be performed by the Missoula association after it had become well established. This record of rates includes not only the truckers' rates to the consolidating points but also those of the intermediate railroads. Thus, for example, if a wholesaler places an order with a manufacturer located in Louisville, Kentucky, he may not be familiar with the best and cheapest way of routing the goods to the Chicago consolidating point. wholesaler in this case would contact the Billings Shipping Corporation, obtain the necessary information from the assembling rate file, and then place the order with the manufacturer, including complete shipping instructions. To facilitate the inclusion of the shipping instructions with each order the Billings Shipping Corporation furnishes each member with a supply of shipping instruction stickers to be attached to the purchase order. (Figures 7 and 8.) It was estimated that a saving of approximately fifty cents per hundred pounds resulted from the use of the assembling rate record. Mr. Early also mentioned that in the majority of cases the goods were shipped to the consolidating point by means of truck rather than rail.

VI. CONSISTENCY OF SHIPMENTS

The regularity of shipments was discussed during this

Route via.

Shippers must make B/L read to:

Billings Shipping Corporation c/o Crooks Terminal Warehouse 433 W. Harrison Street Chicago, Illinois

In order to secure assembling rates show in body of each B/L consignee

at Billings, Montana

FIGURE 7 SHIPPING INSTRUCTIONS FOR DELIVERY TO CHICAGO CONSOLIDATING POINT

Ship this order to:

c/o Billings Shipping Corporation Central Warehouse St. Paul, Minnesota

Your bill of lading must conform with the above routing instruction to protect pool oar charges.

FIGURE 8
SHIPPING INSTRUCTIONS FOR DELIVERY TO
ST. PAUL CONSOLIDATING POINT

in the tonnage shipped from month to month. Mr. Early stated that there was no definite answer to the question of tonnage consistency because of so many variable factors at work simultaneously. Such factors include the general seasonal purchases of the various wholesalers, changes in the price level, new products, governmental regulations such as taxes and various restrictions, and the tendency to carry high or low inventories depending on the business outlook. However, in the case of the Billings Shipping Corporation, such a wide variety of goods are handled, and in such large quantities, that the volume of tonnage has remained at a rather steady level from period to period. Some items decrease in tonnage at certain periods of the year, but these decreases have generally been offset by increases in other items.

VII. DETAILED OPERATIONS OF THE BILLINGS SHIPPING CORPORATION

The following discussion presents the general operating procedure for the Billings Shipping Corporation.

The forwarding agents, Crooks Terminal Warehouse in Chicago, and the Central Warehouse Company in St. Paul, receive the merchandise from the various manufacturers and suppliers according to the shipping instructions from the purchasing wholesalers. The freight forwarders load the cars and make out a large detailed report called a "manifest"

which lists all the items in each car and to which wholesalers the goods are consigned. (This manifest is one of the railroads' requirements of all freight forwarders.) The manifest is attached to the freight bill for the transportation cost between the consolidation point and Billings. Also attached to these documents are copies of the various freight bills of the truckers and other railroads for the transportation rendered from the suppliers to the consolidating point. railroads that furnished transportation service from the suppliers to the consolidating point draw drafts on the Billings Shipping Corporation, and the truckers supplying such service merely send their invoices to the consolidating agent to be forwarded to the corporation. The drafts drawn on the Billings Shipping Corporation and the freight bill covering the consolidated shipment from either Chicago or St. Paul are paid the day after receipt of these documents. The truck bills are paid on a weekly basis and the customary accounts payable ledger is maintained by the corporation.

Upon receipt of the consolidated freight bill and the manifest, an employee in the office of the corporation makes up a distribution sheet. (Figure 9.) This sheet, upon completion, must be reconciled with the freight bill and the manifest. When reconciled it then serves as the basis for billing individual members. The charges are based on the latest freight rates as published by the corporation in the

BILLINGS SHIPPING CORPORATION

Rate Bulletin (see Figure 6 page 54). The actual billing to the wholesaler is made on a form very similar to a regular railroad freight bill. (Figure 10.)

After the distribution sheet and the billings to members have been completed, a Recapitulation Report is made. (Figure 11.) This report shows a breakdown of the total charges for the freight car. The billings to the individual members are then totaled and recorded on this sheet under the item of "Freight Revenue". The difference between the total charges of the railroads and the freight forwarders. and the total revenue represents the "profit" or "loss" on the freight car. A profit must be shown, and it should theoretically equal the operating expenses of the Billings Shipping Corporation allocated to the processing of that one car. If a "loss" is shown on this report, it indicates that the charges made to the individual members were too low and that the published rates should be revised on the Rate Bulletin. If a "profit" is indicated, this profit should not be so large that it exceeds the actual cost of operating the corporation, because the organization functions as a non-profit company. The rates, however, would not be revised because one car shows an excessive profit or a loss as there are many variances in the rates depending on the type of merchandise in the car, the size of the car, and the total weight. Usually the charges to members are revised if there is a

Original Freight Bill

BILLINGS SHIPPING CORPORATION

Phone 2543

Consignee Destination From Pro. No.

Date

Description	Weight	Rate	Freight	Advances	Total
	Į				
	-				
	ł				
		!			
and the second					
te Received	194			cks payabl	
gna ture		_ Bil	lings Shi	pping Corp	oratio
		P.0	. Box 209	9, Billing	s, Mon

FIGURE 10
WHOLESALER'S FREIGHT BILL

RECAPITULATION REPORT NO.

FROM	CAR	No.	DATE	
Nor	thern Pacific Ra	ilway Co.		
C.	B. & Q. Railroad	Co.		
		Total		
Centi	ral Warehouse Co.			
Crook	cs Terminal Wareh	ouses, Inc.		
Handl	ing Charge	<u>.</u>		
Freig	ght Revenue			
		Total		
Advar	ice Charges	•		
c. 0.	D. ' S	-		
Chica St. I	eated or Refriger ago Weight Paul Weight		over	short short short
	Contraband Wt.	Chicago	#	
	17 17	St. Paul	7	
Bill1	ngs References:	CB&Q RAILROAD (Chgo to Minn.	NP Rail	lroad Tfr. to lings)
	Car No.			
	WB Date & No. Pro. & Date			
Chica	go Pro. Nos			
St. P	aul Pro. Nos.			

FIGURE 11.

definite trend in one direction.

The common practice is to fix the rates charged to members at a conservative figure, so that over a period of one year's operations, the final accounting shows a slight "deficit". Each year this deficit is eliminated by a "contribution" from the Billings Traffic Bureau, such funds actually coming from the \$25.00 to \$100.00 annual dues paid by the wholesalers to the Billings Traffic Bureau.

under an all-commodity rate but rather under a two rate system. It has been granted two rates for full car shipments; one rate applies to third class goods and higher, and the other rate applies to fourth class goods and lower. In Missoula, such an organization would have to apply for an all-commodity rate through the railroads and obtain the approval of the Transcontinental Freight Bureau, Montana Lines Committee and the Interstate Commerce Commission. Mr. Early explained that the Montana Lines Committee is a group made up of the rate experts of the Northern Pacific Railroad; Chicago, Milwaukee and St. Paul Railroad; Great Northern Railroad, and the Burlington Road.

VIII. EFFECT OF A MISSOULA CAR POOL ASSOCIATION ON PRIVATE CARLOADING COMPANIES

Mr. Early expressed an opinion that the operating carloading companies such as Universal Carloading & Distributing

Company and National Carloading & Distributing Corporation would strongly oppose any all-commodity rate to Missoula and the establishment of a car pool association. The main reason for this opposition would be the loss of revenue in such places as Butte, where they have local offices and distributing facilities. A certain amount of business is done by Missoula merchants with dealers in Butte who have already made use of these carloading companies by having shipments from manufacturers handled through their facilities. Many orders of Missoula merchants are placed with the manufacturers with the shipping instructions stating "cheapest way". In such instances the manufacturers route the orders to these carloading companies and after the merchandise is received in Butte, trucking companies then transport it to Missoula for another freight charge. It is certain that the establishment of a pool car association in Missoula would reduce the amount of freight now being handled in Butte. By the establishment of a pool car association in Missoula, the portion of freight handled by these private carloading companies would be eliminated and the profit they are now earning on such operations would be diverted to the Missoula members through lower rates.

IX. THE FREIGHT FORWARDER PROBLEM

A major problem in starting a car pool association in Missoule would be that of obtaining the services of a reliable freight forwarder in Chicago, or some other consolidating point. Er. Early stated that at present this is a difficult problem, and that undoubtedly it would require a representative of the organization to travel to Chicago or some other point and make the arrangements by personal contact.

Missoula's problem in this respect would be more difficult than for an organization such as the one in Billings
because of the very nature of the goods handled. In the case
of Billings, the members are all wholesalers dealing only in
certain materials and their individual orders would be comparatively larger than the retailers' orders in Missoula.

It would be necessary for a Missoula organization to be made
up primarily of retailers because of the type of business in
this locality. In Billings, membership in the corporation
was restricted by various requirements, whereas in Missoula,
the qualifications for membership would have to be liberal in
order to secure enough business for successful operations.

Since the retailers' shipments would normally be smaller than wholesalers' shipments, the individual freight cars would be made up of more orders and a greater variety of goods. Such a carload would require considerably more handling on the part of the freight forwarder. Freight forwarders are now hesitating on such arrangements, according to Mr. Early, because of the high labor costs involved and also because there is an abundance of business other than

that which a Missoula organization could offer.

X. SUMMARY OF CAR POOL ASSOCIATION AT GREAT FALLS

A review of the Great Falls par pool association was covered during this meeting. This organization is quite similar to the one that would be formed in Missoula because of the nature of the business, that is, consisting mostly of retailers rather than wholesalers. This association was formed recently by assessing each member \$10.00 and obtaining the balance of its working capital from a loan. operations in Great Falls, are somewhat different from those in Billings. In Great Falls, when a shipment is received. it is handled by a local transfer company. This transfer company pays the freight bill to the railroad and is later reimbursed by the association. In this manner the transfer company is financing a great part of the business. The same type of arrangements possibly could be made in Missoula through Reely's Storage and Freight Terminal because it has all the necessary equipment and facilities for handling full It was Mr. Early's opinion that the local transfer agent should partially finance the organization by paying the railroad charges in advance, because of the amount of business the agent would derive from the association.

XI. PROBLEM OF FURNITURE DEALERS IN A MISSOULA ASSOCIATION

Mr. Early was asked for his opinion regarding the furniture dealers in Missoula since they already have their own pooling arrangements. (Refer to page 30.) He stated that they should be invited to join the association since furniture takes a high freight rate classification and would result in considerable savings. He added that all the furniture dealers should not be admitted to membership because of the possibility that a car might be loaded completely with furniture which is comparatively light considering its bulk, and therefore the minimum weight for the freight car may not be obtained. The ideal car load would be a mixture of low classification items which would build up the required weight and high classification items which would build up the greatest freight savings. However, apparently Mr. Early is not aware of the present full carload rate on furniture now being obtained by this furniture pool. As pointed out in the previous discussion of the Missoula furniture car pool the rates are from \$2.39 per hundred pounds to \$3.63 per hundred pounds depending on the minimum weight of the shipment. If a Missoula pooling association was formed, and application for an all-commodity rate was made, it appears that the rate would be approximately \$4.00 per hundred pounds. Under these circumstances there would be

no incentive for the furniture dealers to join the association, except that perhaps they would receive quicker delivery because the association would have more frequent shipments than the present furniture pool. This does not inferthat an all-commodity rate of an estimate \$4.00 per hundred pounds is too high, because the carload rate on furniture is less than this amount. Generally carload rates will be lower than all-commodity rates. All-commodity rates result in a saving only over less-than-carload rates.

XII. SUGGESTED PROCEDURE FOR ORGANIZING A MISSOULA ASSOCIATION

A proposed plan for organizing a car pool in Missoula was outlined to Mr. Early, and he concurred that the following steps were in order:

- 1. A meeting should be called by the Chamber of Commerce consisting of the local industrial development committee or most of the prospective members to the organization. This meeting should include:
 - a) a review of the steps taken to date regarding the car pool,
 - b) a discussion of the possibility of organizing an association in Missoula, including the problems to be encountered and possible solutions,
 - c) a discussion of the type of organization to be formed.

- 2. A detailed study of the prospective members' freight bills for a certain period of time. This part of the study is necessary to obtain a reasonable estimate of the amount of freight to be handled and also to determine the type of goods shipped. The type of goods shipped is important because this has a bearing on the estimated savings due to the different class rates.
- 3. If it is decided that a car pool arrangement should be established in Missoula, another meeting should be called for the purpose of determining how to raise the necessary money for a fund with which to meet the expenses of organizing the association.

XIII. SUMMARY

In summary, Mr. Early strongly urged the following points:

- 1. A minimum of 30,000 pounds weekly must be obtained.
- 2. The individual appointed to act as manager of the organization must be thoroughly educated and experienced in dealing with railroads, freight rates, and transportation in general.
- 3. Extreme care must be exercised when selecting the freight forwarder in Chicago or other consolidating point.

- 4. The local transfer company should be obliged to help finance the association's operations by paying the freight bill when due. The association then bills the members, collects the money, and reimburses the transfer company for the freight bill it paid and also for its own handling charge.
- 5. The association must be organized on a non-profit basis.
- 6. A preliminary study of the estimated tonnage is essential.
- 7. A working capital fund of at least \$4,000.00 to \$5,000.00 is necessary to cover the cost of organization and setting up actual operations.

CHAPTER V

PRELIMINARY STEPS TAKEN FOR THE DEVELOPMENT OF A POOL CAR ASSOCIATION IN MISSOULA. MONTANA

The Industrial Development Committee of the Missoula Chamber of Commerce held a luncheon-meeting at the Park Hotel on October 14, 1949, for the primary purpose of reviewing the progress made on the pool car study and to determine the next steps to be taken for its development. Mr. I. V. Anderson, chairman of the committee, led the discussion which resulted in the appointment of a special committee consisting of Mr. George D. Pendray, Mr. Mont B. Morrow, Mr. A. E. Strom, and the writer, to carry out the development of this study.

It was decided that this committee should adopt a program for a study of the freight coming into Missoula from points east and south of St. Paul, Minnesota, in order to determine whether there is a sufficient quantity of freight originating from this section of the country to warrant the establishment of a pool car organization. A resolution was passed to the effect that a meeting of this new committee should be held at the local offices of the Chamber of Commerce for the purpose of developing a procedure for the analysis of freight bills of Missoula wholesalers and retailers.

I. THE FREIGHT SURVEY OF MISSOULA

On October 25, 1949, this committee met at the offices of the Chamber of Commerce and the main topic for consideration was the proposed freight bill analysis. It was the consensus that an attempt to analyze the freight bills personally by the individual committee members would be unsatisfactory, primarily because of the length of time required. It was decided, therefore, to issue a letter to prospective members of the contemplated pool car association, requesting them individually to furnish the freight information on forms which would be enclosed, and to return them to the Chamber of Commerce for recapitulation. The letter was drafted and approved by the committee, and it was decided to distribute this letter to twenty-four wholesalers and to all the major retailers (totaling seventy-four) that perhaps would be interested in joining the proposed association. The writer drafted the form to be included with this letter and it received the approval of the committee. Refer to Figure 12 for a copy of the letter and Figure 13 for the enclosed form.

The letters and forms were printed and distribution was made by the Chamber of Commerce on November 3, 1949.

For a detailed schedule of the distribution of this letter refer to Appendix A and Appendix B.

The general opinion of this special committee was that



207 E. MAIN

PHONE 6624

MISSOULA, MONTANA

November 3, 1949

ARE YOU INTERESTED IN SAVING MONEY?

During the past six months, a Subcommittee of the Industrial Development Committee has been studying the possibility of organizing a Pool Carloading Association.

This Committee is convinced that if such an association could be formed, Missoula retailers and wholesalers would save thousands of dollars each year on freight costs.

In order that the Committee may have concrete facts upon which it can determine whether or not such an organization is feasible, it needs your help. Will you assist to the extent of listing on the enclosed forms (additional forms available upon request) the tonnage which you have received during two average months, taken from your freight bill files? If it is inconvenient for you to do this, upon your request we will arrange to have someone compile the information for you from your records.

If you are not familiar with the operation and possible savings under a Pool Carloading plan, please call the Chamber of Commerce office, Phone 662h, and a committeeman will be glad to call on you and give you full information. If possible, the Committee would like to have this information within the next two weeks.

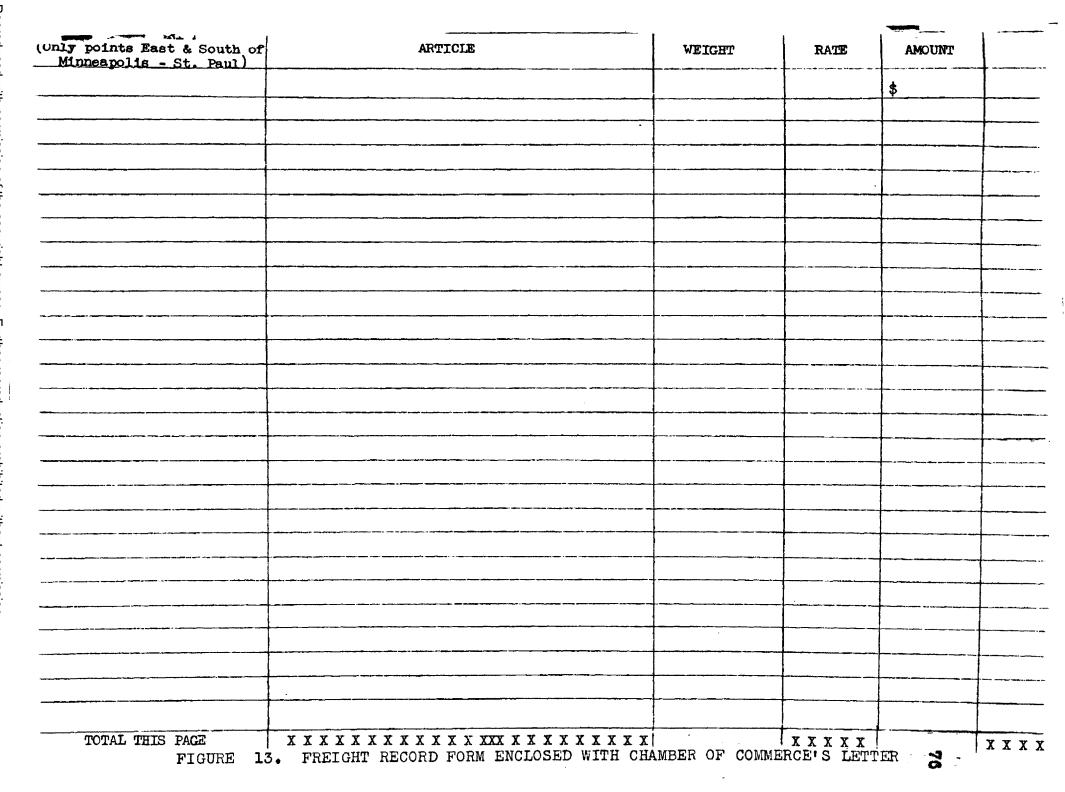
Sincerely.

I. V. Anderson, Chairman

Industrial Development Committee

IVA:cld

FIGURE 12



cause of the time involved in obtaining and listing the requested information. It was hoped, however, that many would make inquiries concerning the transportation plan, and that perhaps in this manner, with the personal aid of a committeeman in such cases, the necessary information would eventually be obtained.

At the termination of the two-week period in which the freight data was to be accumulated, the writer checked with the Chamber of Commerce to determine the response to the letter. At that time only two or three firms had replied and it was suggested that more time be allowed before considering all replies received. At the end of another two-week period the writer again contacted the Chamber of Commerce, and at this time it was clearly indicated that no more replies would be received.

The campaign to obtain the requested freight information by direct mail rather than by personal contact did not meet with much success. The response to these letters was practically negligible, with only four of the 24 wholesalers and three of the 74 retailers submitting replies. None of the dealers contacted the Chamber of Commerce in response to the offer to have the information compiled by a representative of this organization. There were no requests to have a

committeeman call at a wholesaler's or retailer's place of business to explain the general operations of a pool carassociation.

In an attempt to obtain the necessary freight information, and at the same time to try to determine the reason for such a small number of replies, the writer contacted the Chamber of Commerce and secured the entire record dealing with the freight survey. During January and February, 1950, the writer personally interviewed twenty-three retailers and eleven wholesalers, and in most instances, obtained permission to analyze their 1949 freight bill file. (Refer to Appendix C for a detailed list of dealers personally contacted.) From these freight files the freight compilation forms originally distributed by the Chamber of Commerce were completed. Because of the considerable length of time involved in securing this information from the dealers, the freight record of only one month was recorded. Each month recorded was selected at random and in all cases represented an average month's freight shipment according to the dealer.

The freight weight reported by the seven replies received directly by the Chamber of Commerce totaled 45,646 pounds. The total weight obtained by direct personal contact by the writer amounted to 145,677 pounds.

The weight recorded by the writer included only freight bills which indicated that the shipment was made direct from

the manufacturer or other supplier to the dealer in Missoula. During the analysis of these dealers' freight bill files, it was noted particularly that a great number of these invoices were for less-than-carload shipments from Butte, Montana, and that the supplier was located in some other city, generally east or south of St. Paul. Upon inquiry it was found that these particular shipments were being routed from eastern cities through the services of private carloading companies, and this was substantiated in a few cases where copies of the original freight bill covering the shipments to Butte were attached to the freight bill covering services from Butte to Missoula. One dealer mentioned that approximately one half of his shipments from the east came by way of a carloading company to Butte, and then by truck from Butte to Missoula. Therefore it would be conservative to increase the recorded weight obtained by the writer by perhaps 5 or 10 per cent in order to account for these additional shipments.

The procedure of routing shipments to Butte through the services of private carloading companies and hence to Missoula by truck was explained by another dealer. Orders are placed with the manufacturers and suppliers and the shipping instructions are simply "cheapest way". With those instructions the traffic departments of the manufacturers route the shipments through the carloading companies.

As previously stated, the purpose of this preliminary

freight survey was to determine whether there is a sufficient amount of less-than-carload freight being shipped from the east to warrant a pool car organization. The special sub-committee of the Industrial Development Committee was of the opinion that at least one full carload should be shipped from the consolidating point each week, and that the minimum weight per car should be 30,000 pounds. This sub-committee also felt that two cars per week would be considerably more satisfactory, not only because of faster service by having a car released from the consolidating point every three or four days instead of one car per week, but also from the standpoint of costs. With more shipments, the overhead expenses of the organization would be more widely distributed, resulting in lower total costs per pound for the members.

Computing a month as equivalent to four and one-third weeks, the total monthly weight, on the basis of one 30,000 pound car per week, would be 129,900 pounds, and on the basis of two cars per week it would total 259,800 pounds. The total weight tabulated thus far from the replies received by the Chamber of Commerce and from the personal survey is 191,323 pounds. A 5 per cent increase applied to the weight recorded by the personal survey, in order to account for the less-than-carload shipments routed through the carloading companies at Butte, would amount to an additional 7,284 pounds. Therefore the grand total of recorded weight

would be 198,607 pounds.

Since only approximately one third of the total dealers originally solicited have been included in these figures, it would be reasonably conservative to double the above grand total figure. On this assumption the final total weight would be 397,214 pounds, which exceeds the estimated minimum requirements for a two carload weekly schedule by 137,414 pounds.

II. ADDITIONAL FACTORS DEVELOPING FROM THE FREIGHT SURVEY

In addition to the above estimated weight, other factors not included in the computation would tend to materially increase this tonnage. Such factors are shipments now moving from the eastern part of the country to Missoula by motor carrier, stop-in-transit cars, parcel post and express, and the possibility including shipments of dealers outside Missoula, but within the surrounding area. Some of these factors are discussed in detail below.

The personal interviews with dealers not only produced the information concerning freight weight, but also developed many other factors that should be considered in connection with the pool car plan. The first point deserving comment was the dealers' reaction to the interviewer and especially to the request for obtaining the freight weight information. This is a very important factor because a

favorable dealers' attitude toward the pool car plan is essential to its success. In most cases the interviewer, after stating his purpose, was welcomed, and, after a brief discussion. was granted access to the freight bill files. A few dealers even apologized for not responding to the letter sent to them by the Chamber of Commerce. In a few cases, a lengthy explanation of the entire plan was required before permission to review the freight bill file was granted. In a few instances. it appeared that the dealer felt that the disclosing of such freight information was tending toward the disclosure of confidential business information, but in such cases the attitude ultimately changed during the course of the conversation. In a few other cases the interviewer was not granted permission to review the freight bill file, but was asked to return within a few days to obtain information which would then be assembled and recorded by either an employee of the firm or by the dealer himself.

One dealer, very familiar with pool car plans, having previously been employed by another pool car association, discussed the proposed plan at great length with the interviewer. The interviewer asked what this dealer considered to be the primary reason for the poor response to the letter issued by the Chamber of Commerce. His reply was that many dealers were not acquainted with the operations of a pool car association, and that only a very few realize the great

amount of savings in freight cost that may be obtained by an efficiently managed organization.

Another dealer mentioned that until a few months ago, he purchased from suppliers in the east but that due to the high transportation cost, orders were now being placed with suppliers in Washington. If transportation rates were less than the present high level this dealer would again purchase from eastern suppliers, because he prefers their quality of merchandise, or because of a wider stock of items from which to select, or perhaps due to better service. If other cases similar to this one exist, some additional tonnage from the east could be anticipated due to the lower rates obtained through the pool car plan.

Another dealer stated that his shipments were routed from eastern points in truckloads, not because there was a saving in transportation costs, but because of a saving in the length of time the goods were in transit. He estimated that shipping by truck reduced the time in transit one full day, adding that freight by rail was slow because of the necessary stops in transit for loading and unloading the car, and that frequently a car could lose one full day or more at one stop enroute. Under ordinary circumstances a freight car loaded in Chicago or St. Paul and routed straight through to Missoula as the only point of destination would not be delayed at intermediate points or side-tracked as a stop-in-

transit car. If the length of time in transit is the deciding factor as to method of shipment, and if a pool car to one
destination point would save time, such dealers as mentioned
above, would also add their orders to the pool car plan.

Several dealers hesitated at the idea of a pool car association because of the long delays between the release of each car at the consolidating point. As previously mentioned, these dealers associated long delays with all pool car plans because they were aware of the operations of a manufacturer's stop-in-transit pool car. Such cars are usually released at intervals of from two weeks to two months. After these dealers were informed that the proposed pool car association intended to ship one or two full cars on a weekly basis, they agreed that such a plan would be very beneficial.

A few dealers objected to the plan on the grounds that they would not be able to receive goods soon enough on those orders that required the fastest possible service. It was pointed out that even if a dealer participated in the plan that he would not be required to route all his orders through the pool car system. Dealers would still be free to instruct suppliers to ship their purchases in any manner they desire. There would be no compulsion on the part of the members to ship goods in the pool cars.

On the basis of this preliminary freight survey and the above mentioned factors, Missoula does have a sufficient

quantity of goods shipped from the east to warrant the establishment of a pool car association.

III. FINANCING THE POOL CAR ASSOCIATION

As mentioned previously, it was noted that a similar method was used to finance the operations of pool car associations in Montana. These organizations were formed as nonprofit corporations and sold stock at a nominal price to the participating members. The proceeds from the sale of stock produced only a relatively small percentage of the necessary working capital. The balance of the funds were obtained by loans. As discussed on page 48, the Billings Shipping Corporation originally financed its operation by a \$5,000.00 loan made by the Billings Traffic Bureau in addition to the funds received from the stock issue. The loan actually came from funds which represented dues paid to the Billings Traffic Bureau by its members. The members of the Billings Shipping Corporation were all members of the Billings Traffic Bureau, so in reality the pool car association was financed by its own members in an indirect manner.

A Missoula pool car association would face a different problem. It has been estimated that a working capital fund of approximately \$5,000.00 would be the minimum requirement. This amount of money is considered necessary in order to meet the initial expenses.

These initial expenses would be substantial. The success of the entire pool car plan depends on the person selected as manager of the association. A liberal salary therefore would have to be offered for this position in order to attract a well qualified person. This salary must be currently paid during the organization period, prior to the actual receipt of any revenue. In addition it would probably be necessary to employ another person as a secretary.

Prior to the actual operations, expenses must be incurred for sending a representative of the proposed association to St. Paul or Chicago to locate a reliable freight forwarder and to enter into a contract for the association.

The actual organization of the association requires certain expenses such as legal fees for the incorporation and cost of obtaining the charter, stock certificate, stationery and miscellaneous supplies.

At the start of actual shipments, freight bills rendered by the railroads must be paid within a very short period of time. As the first car arrives, a certain amount of time would be required to distribute the charges to the various members, send out the billings and collect the payments. These payments would not be received in time to be used for settling the railroad's charges for the car. Perhaps two cars may be received at Missoula before collections on the billings to the individual members would be received. It

has been roughly estimated that a full carload may cost the association \$1,000.00 to \$1,400.00, so that it may have to pay \$2,000.00 to \$2,800.00 before receiving any funds from the members.

This amount of working capital cannot be obtained in Missoula in the same manner that the Billings Shipping Corporation was financed. The sale of capital stock to one hundred subscribers would produce \$1,000.00 if sold at \$10.00 per share, or \$2,500.00 if sold at \$25.00 per share. In either case, the balance required to make up the minimum amount of working capital, \$4,000.00 or \$2,500.00 respectively, would have to come from an outside loan.

It appears that a loan from a financial institution would be rather difficult to obtain. Assuming that \$5,000.00 is the minimum working capital and \$1,000.00 was obtained through the sale of stock, the difference of \$4,000.00 would represent the amount of the loan. A \$4,000.00 loan would be equivalent to 80 per cent of the total capital of the corporation. If the stock sold at \$25.00 per share the proceeds would amount to \$2,500.00 and a loan amounting to \$2,500.00 or 50 per cent of the capital would be required. In addition, the corporation would have no tangible assets to pledge as security for the loan. Under these circumstances it appears that funds would only be granted if some individuals, such as the officers of the association, would underwrite the loan.

A suggestion was offered to the writer that possibly the local Chamber of Commerce would be in a position to advance the necessary money from its own funds. On January 31, 1950, the writer contacted the Chamber of Commerce to determine whether the pool car association could anticipate financial assistance from this organization. The assistant manager of the Chamber of Commerce informed the writer of its present financial status and budget problems, and it was evitent that no aid could come from this source.

Another suggestion was the issuance of assessable stock. The effect of this suggestion would be that indirectly all the members of the association would be underwriting a loan. It is the general opinion that the issuance of assessable stock would not be advisable, because many prospective members would refuse to subscribe to such stock.

One other possible source of funds could be the local transfer agent. The following information was obtained from personal meetings on February 1 and February 2, 1950 with the two major transfer agents in Missoula.

It was pointed out that the agent could pay the railroad freight bill when it was presented, and subsequently
this agent would be reimbursed for this amount plus his
handling charge from collections made through the association
from its members. In this manner the agent is partially

financing the association for the interval between the date of payment to the railroad and the date of receipt of funds from the association. Such an arrangement would considerably reduce the working capital requirement of the association.

Another method of handling this partial financing plan would be to have the association compute the members' invoices and issue these to the transfer agent. At the time of actual delivery of the merchandise to the dealers, the agent could present the bills for immediate payment. This system would result in placing the freight charges on an individual C. O. D. basis. A possible disadvantage to this plan would be the fact that the association might not have sufficient time to compute the individual billings before final delivery was made. There are several possible variations of this plan. The invoices could be presented to the dealers at the time of delivery and payment of the charges could be made periodically to the agent, for example, twice a month. This would definitely be an advantage for the dealers, but the transfer agent would thus be required to have his money tied up in paid freight bills to the railroad, and would therefore be justified in increasing his handling or service charge, and undoubtedly he would require the association to guarantee payment by all dealers. In addition there would be the problem of receiving collections promptly from the dealers on the bi-monthly due dates.

It is not absolutely necessary that the association compute the billings to the dealers. This function could be performed by the transfer agent. In such a case the association would be required to notify the agent in advance of the proper rates to charge for the transportation from the consolidating point to Missoula. With these rates the agent could then make the billings. This service, on the part of the agent, would obviously increase his handling charge, as considerable time would be required to reconcile the manifest (a schedule made out by the freight forwarder at the consolidating point listing all the articles in the car and to whom consigned) with the actual merchandise in the car and then to classify the goods, apply the rates and compute the charges, and draw up the invoices. This question of determining which party should issue the invoices should be determined in favor of the most economical method.

Additional information was obtained through the personal meetings with these transfer agents. It was suggested that it would be advantageous to select a freight forwarder at a consolidating point that could use the facilities of both the Northern Pacific Railroad Company and the Chicago Milwaukee St. Paul and Pacific Railroad Company. In this manner the goods could be routed over the lines of either road at the direction of the pool car association. The rates would be identical due to interstate commerce regula-

vary. One road might give preference to a car by routing it as through freight thereby reducing the length of time in transit. By having the services of both railroads available, the service given by the carriers would tend to be on a more competitive basis, thus resulting in more efficient service. The routing of cars over the two lines could be adjusted according to the service received.

Another point mentioned by one transfer agent was that the delay of handling the merchandise in Missoula would not be for any prolonged period. It was stated by both agents that the handling of a carload of merchandise and delivery to the dealers would ordinarily be completed within one day. The transfer agent would be anxious to unload the car so it could be released to the railroad as soon as possible due to the fact that after a forty-eight hour period demurrage charges would be made by the railroads. The agent would also be anxious to make final delivery after unloading the car, since a delay at this point would result in tying up his loading dock facilities and also the available storage space.

Another meeting was arranged with representatives of the Northern Pacific Railway Company concerning the local distribution of freight. It was suggested by the N. P. that the entire processing of the merchandise arriving in Missoula in a pool car could be handled through the Northern Pacific

Railway Company and its subsidiary, the Northern Pacific Transport Company. Arrangements could be made to have local delivery performed by the transport company and it would also collect the charges from the dealers at the time of such delivery. From these collections, the transport company's handling charges would be deducted and the balance remitted to the association. However the individual billings to the dealers would have to be made by the association and given to the transport company prior to delivery. In addition, the association would have to pay the railroad immediately for the freight charges from the consolidating point, as well as the freight forwarder's charge and the freight bills covering transportation from the supplier to the consolidating point. This means that the association would have to secure a loan in order to cover all these charges before it receives collections from the Northern Pacific Transport Company.

The answer to this entire problem of financing would have to be determined by the manager of the association. To the writer it appears that using the services of the Northern Pacific Transport Company may be the most economical method, although no definite charges were mentioned in the conversations with the local transfer agents. The transport company's handling charge may be somewhat less than the charges of the other local transfer agents because of the desire to obtain all the association's business for the Northern Pacific Rail-

way Company. This gain, however, may be offset by the expense of financing the association. The final decision will have to be based on a cost analysis and consideration of the services to be received.

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

It is evident that it is more economical to ship goods between two established points under an all-commodity rate rather than under a less-than-carload rate. However, to be able to ship goods under an all-commodity rate, certain requirements must be met. The most important requirement is that a large quantity of goods must be shipped from one point of origin within a certain period of time. In Missoula, the majority of business firms that purchase merchandise in the east, usually buy in relatively small quantities and pay the high less-than-carload rate. This practice is to be expected when consideration is given to the size of the companies. A steady flow of small shipments arriving in Missoula is the result of this practice.

In place of this steady flow of small shipments, a regular schedule of fewer, but larger, shipments possibly could be arranged through the cooperation of these many small business firms. This cooperation would result in the organization of a pool car association.

Prior to the actual establishment of such an association considerable work must be done. The success of a pool car association in Missoula is dependent on the many variable factors indicated in previous sections of this report.

Because of this uncertainty, no definite statement can be given as to whether such an organization would be a success. The present study however, clearly indicates the <u>possibility</u> of a successful pool car association in Missoula. This study could be readily used as the basis for a professional project with the purpose of actually putting such an organization into operation.

In the particular case of Missoula, if all the dealers purchased their supplies and merchandise at one marketing center such as Chicago, or the Twin Cities, there would be no need to hesitate about forming the pool car association. The results of the freight weight survey of the city indicated that there is a sufficient quantity of goods shipped from the east to warrant a pool car plan. But the problem is complicated by the fact that merchandise purchased in the east originates at widely scattered points. This problem is further complicated, since the freight charges applicable to this merchandise for transportation services from the supplier to the consolidating point are dependent on the various territorial classifications and rates, the various distances between the points of origin and the consolidating point and the mode of transportation used. In addition, consideration must be given to the charges made by the freight forwarder and the local transfer agent in Missoula, and the operating expenses of the car pool association.

Some of the charges involved in a pooling plan can be reasonably estimated. For example, within certain limits, depending on the total freight tonnage handled, the operating expenses of the association would remain fairly constant. The largest item of expense would be the association's payroll. Therefore as the actual freight tonnage fluctuated between these limits, the operating expenses would tend to remain steady. Converting these expenses into terms of cost per hundred pounds of freight, it would be found that the cost per unit would also fluctuate although in the opposite direction. As the tonnage increased the distribution of the operating expenses would be spread over more units, and the expense per unit would decline; as the tonnage decreased, the operating expense per unit would necessarily increase. the total freight tonnage exceeded the upper limit, the association's operating expenses would likewise increase because of the necessity of increasing the number of employees to handle the additional freight. The manager of the association could estimate the operating expenses and in this manner, the amount per unit to charge the individual members could be closely determined.

The freight forwarder's charge and the local transfer agent's charges could be closely estimated by personal contact prior to the formal act of entering into contracts with them.

The most difficult charge to estimate is the charge for the transportation service from the point of origin to the consolidating point. To determine such charges, each individual case would have to be studied in the light of its own particular factors. Estimating these charges would require the services of a person that possesses a thorough knowledge of the transportation business.

It is the general opinion that the logical points for consolidating the shipments are Chicago and the Twin Cities. In the author's opinion the Twin Cities should be the initial consolidating point, and perhaps after a period of successful operations from this location, the second consolidating point could be established. The basis for this opinion is the fact that a relatively large percentage of the total freight from the east is purchased within the vicinity of the Twin Cities. If Chicago is selected as the consolidating point, this Twin Cities' tonnage would be entirely eliminated from the plan, because it would be more economical to ship this freight directly from the Twin Cities to Missoula at the less-than-carload rate. The reason for this is obvious, since it would cost considerably more to ship the goods to Chicago in order to obtain the all-commodity rate, than the savings resulting from the use of the all-commodity rate.

Mention should be made at this point of the possibility of routing merchandise in the opposite direction from Missoula to reach the freight forwarder. The limit to the distance which merchandise can travel in the opposite direction is fixed by the amount of the charges for such a haul. Points of origin beyond the freight forwarder's location may be at a considerable greater distance from the consolidating point before it would be unprofitable to ship the merchandise in a pool car. This decision to ship goods through the services of the pool car system or to ship them directly to Missoula is conditioned by all the variable factors previously mentioned, and would require the services of a freight expert.

To determine whether it would be more economical to ship merchandise through the pool car system or to route the goods directly from the supplier to Missoula does not infer an endless study. As the facts of each case are determined, they could be recorded in a separate freight information file. This record would then be a valuable source of information for processing future cases. Such a record would be very similar to the "assembling rate" file maintained by the Billings Shipping Corporation.

The final selection of the freight forwarder, whether the agent is located in Chicago, the Twin Cities or some other city, should be based on the opinion of the manager of the association. It is the author's opinion, however, providing all other factors are equal, that the forwarder that

has the use of the facilities of both the Northern Pacific Railroad Company and the Chicago, Milwaukee, St. Paul and Pacific Railroad Company, should be the one selected. The information obtained by the writer during a meeting with one of the local transfer agents is the basis for this opinion.

It was pointed out at that time, that since the actual freight charged by either railroad would be identical, the railroads would tend to compete for the association's business on the basis of services rendered. Such a situation would definitely be to the advantage of the association.

The question of the proper basis to be used for distributing the total pool car freight charges to the individual members must be settled. Of the two methods previously discussed, the method of distributing the charges on a strictly weight basis is definitely the guicker and easier method. The one drawback to this method is that the charges may not be distributed equitably among all the members. It should be mentioned that such inequities could be subsequently adjusted by periodical refunds to certain members. To determine the amount of these refunds, however, would entail a rather detailed record system and undoubtedly such a record would have to depend on freight classifications, which is the basis of the second method. The second method classifies all items in the car and then arbitrarily sets a rate for each class. If these arbitrary rates result in a profit or

a loss to the association after a period of time, they could then be adjusted accordingly. It is the author's recommendation that the method of basing charges on the various classifications should be used. The disadvantage of classifying the items prior to final delivery is more than offset by the process of determining inequities and making refunds. In order to make refunds the funds would have to come from an accumulated profit, and therefore the association's initial charges would have to be generally slightly higher. It is obvious that the members would prefer to have the original charges as low as possible and no future refunds.

This study has brought out two major points: (1) transportation costs in Missoula are high; (2) there is a possibility of successfully operating a pool car plan to reduce transportation costs. Therefore it would be advisable to have a detailed investigation of the pool car plan undertaken on a professional level. Such a step, however, requires the use of funds with no immediate return. Thus it is up to the dealers and merchants in Missoula to determine whether this project should be undertaken. An important consideration is that the entire plan requires leadership and initiative, and perhaps these could be obtained through a group such as the local Chamber of Commerce. To the writer it appears that the costs involved, not only in money

but also in time and effort, would be well worth while, and if successful, material benefits in the form of savings in freight costs would accrue to all the participating members.

BIBLIOGRAPHY

A. BOOKS

- Berge, Wendell, Economic Freedom for the West. Lincoln, Nebraska: University of Nebraska Press, 1946. 168 pp.
- Converse, Paul D., and Harvey W. Huegy, <u>Elements of Marketing</u>. Third revised edition; New York: Prentice-Hall, Inc., 1947. 795 pp.
- Daggett, Stuart, and John P. Carter, The Structure of Trans continental Railroad Rates. Publication of Bureau of Business and Economic Research, University of California: Berkeley, California: University of California Press, 1947. 165 pp.
- Douglas, Lloyd V., Robert O Skar, and Ray G. Price, Modern Business--An Introduction to Principles and Problems. New York: McGraw-Hill Book Company, 1948. 417 pp.
- Freeman, Otis W., and Howard H. Martin, The Pacific Northwest. New York: John Wiley and Sons, Inc., 1942. 542 pp.
- Gemmill, Paul F., and Ralph H. Blodgett, Economics: Principles and Problems. New York: Harper and Brothers Publishers, 1948. I, 588 pp. and II, 517 pp.
- Moody's Investors Service, Moody's Manual of Investments-American and Foreign--Industrial Securities. New York: Moody's Investors Service, 1949. 3,027 pp.
- Rand McNally and Company, Rand McNally Commercial Atlas and Marketing Guide. Seventy-eighth edition; New York:
 Rand McNally and Company, 1947. 654 pp.

B. GOVERNMENT PUBLICATIONS

- 82nd Annual Report of the Interstate Commerce Commission, November 1, 1948. Washington, D. C.: United States Government Printing Office, 1949. 186 pp.
- United States Department of Commerce, Survey of Current Business--1949 Statistical Supplement. Washington, D. C.: United States Government Printing Office, 1949. 306 pp.

C. UNPUBLISHED MATERIAL

Bessey, R. F., The Economic Assets, Possibilities and Problems of the Pacific Northwest. Report of the Pacific Northwest Regional Planning Commission. [n. p.] [n. n.] 12 pp. APPENDIXES

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APPENDIX A

DISTRIBUTION OF REQUEST FOR FREIGHT WEIGHT INFORMATION WHOLESALERS

Bon Ton Bakery

Motor Supply Co.

Carpenter Paper Co.

Sheehan Bros. & Hober

*Coca Cola Bottling Co.

Sherwin Williams Paint Co.

John R. Daily, Inc.

Westerner's

Dragstedt's

Zip Beverages

Eddy Bakery

Fuller Paint Co.

*General Paint Corporation

Gold Medal Dairies

Golden Glo Creamery

Haines Independent Wholesale Grocery

Hardin Distributing Co.

*Interstate Lumber Co.

K G Distributors, Inc.

Majestic Candy Co.

*Misco Mills

Missoula Brewing Co.

Missoula Drug Co.

Missoula Motor Parts Co.

^{*}Replied to letter from Chamber of Commerce

APPENDIX B

DISTRIBUTION OF REQUEST FOR FREIGHT WEIGHT INFORMATION RETAILERS

*A & C Buy for Less

Advance Plumbing Shop

Allen Drug Store

Anderson Plumbing & Heating Shop

Anderson Tire Service

Barthel Hardware

Bedord Implement Co.

H. O. Bell Co.

Big Broadway Store

Brelje Office Supplies Co.

Britt Furniture Store

Bureau of Printing

Collins Texaco Service Station

Construction Equipment Co.

Davies Farm Supply Co.

Dixon & Hoon Shoe Co.

The Electrical Shop

Estes Maytag Store

Firestone Stores

Florence Hotel Pharmacy

Folsom Co.

Fox Pharmacy

Gamble's Department Store

General Appliance Stores

Hamilton Farm Equipment Co.

Hart Refineries

Hollyoak's Drug Store

Industrial Equipment Co.

Jensen Furniture Store

Jourdonnais Brothers

Floyd Ketchum

Kramis Hardware

L & M Tire Shop

Lembke, the Plumber

J. M. Lucy & Sons

Miller Machinery Co.

Missoula Furniture Mart

Missoula Hardware & Plumbing

Missoula Typewriter Co.

Missoulian Publishing Co.

Modern Plumbing & Building

Supplies

^{*}Replied to letter from Chamber of Commerce

AFPENDIX B (continued)

DISTRIBUTION OF REQUEST FOR FREIGHT WEIGHT INFORMATION RETAILERS

Montgomery Ward & Co.

Morgan Plumbing & Heating Co.

Mountain Tractor Co.

O. J. Mueller Tire Co.

O. K. Tire Shop

Office Supply Co.

*Ogg Shoe Co.

Peek's Pharmacy

J. C. Penney Co.. Inc.

Peterson Drug Co.

Playmor Sporting Goods

Potter Refrigeration Co.

Merton Rasmussen Tire Shop

Save On Drug Stores

Savon Shoes

Schmid Plumbing & Heating Shop

Schmid's Hardware

Seitz Plumbing Shop

Sidler Furniture Exchange

Smith Drug Stores

The Sportsman

Standard Furniture Inc.

Stoick Cut Rate Drug Store

Thrasher Heating Service

The Times

Turmell Tire Co.

Typewriter Service & Supply C

Walford Electric Co.

Bob Ward & Sons

Western Construction Equipmen Co.

Western Montana Electric Co.

Westmont Tractor & Equipment Co.

F. W. Woolworth & Co.

^{*}Replied to letter from Chamber of Commerce

APPENDIX C

DEALERS PERSONALLY SOLICITED BY THE WRITER FOR FREIGHT INFORMATION

WHOLESALERS

Bon Ton Bakery

Majestic Candy Co.

Carpenter Paper Co.

Missoula Motor Parts Co.

Eddy Bakery

Motor Supply Co.

Gold Medal Dairies

Sherwin Williams Paint Co.

Golden Glo Creamery

Westerner's

Dragstedt's

RETAILERS

Barthel Hardware

Missoulian Publishing Co.

Bureau of Printing

O. J. Mueller Tire Co.

Davies Farm Supply Co.

Office Supply Co.

Dixon & Hoon Shoe Co.

J. C. Penney Co., Inc.

Estes Maytag Store

Save On Drug Stores

Firestone Stores

Savon Shoes

Gamble's Department Store

Schmid's Hardware

Kramis Hardware

Typewriter Service & Supply Co.

L & M Tire Shop

Walford Electric Co.

J. M. Lucy & Sons

Bob Ward & Sons

Missoula Hardware & Plumbing

Westmont Tractor & Equipment Co.

F. W. Woolworth & Co.