5-1933

Motor Truck Transportation in Western South Dakota

F. T. Hady
South Dakota State University

Circular 11 May, 1933

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Frank T. Hady

Department of Agricultural Economics
Agricultural Experiment Station
South Dakota State College of Agriculture
and Mechanic Arts
Brookings, South Dakota

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INTRODUCTON

Motor truck transportation has sprung into prominence with great rapidity during the past few years. Likewise the problems of this type of transportation of agricultural commodities have taken on increasing importance during this period. This report deals with only one phase of the problem of transportation of agricultural commodities in the state of South Dakota.[1]

The report logically divides itself into three parts. The first deals with the increasing use of motor trucks in the area covered by the study. The second part deals with a somewhat detailed study of the hauling of crops in the trade territory of one of our typical western South Dakota market centers. Here we get an idea of the distance that grain must move and the proportions hauled by various agencies engaged in the hauling of grain. The third part deals with some of the problems of commercial hauling or trucking in this same area.

The area covered by the first and third parts of this study consists of nine counties located west of the Missouri river, namely: Butte, Haakon, Harding, Jackson, Jones, Mellette, Perkins, Tripp and Ziebach. Figure 1 will show the location of these counties. They were chosen to represent the various combinations of grazing and farming enterprises which are common in this territory. These vary all the way from much grazing and little farming in the northwest counties to much farming and relatively little grazing in the southeast counties.

For the second part the centrally located town of Philip, Haakon county was chosen. The reasons for choosing Philip were partly because of this central location in the area, it appearing to be a more or less "typical" town, and partly because of the fact that material for study was to be found in an unusually accessible form.

The material for the section dealing with the growth of trucking was gathered largely from the records of the South Dakota Motor Vehicle department. These were supplemented by material gathered from the county treasurers of most of the nine counties involved. Material for the portion

1. This study was undertaken as part of a broad study of the problem of transportation of agricultural products as outlined by Professor Murray Benedict, formerly Head of the Department of Agricultural Economics. It is not intended, therefore, to be a finished project in itself.

dealing with commercial hauling was obtained from the records of the South Dakota Railroad commission. The material for the study of the Philip market area was obtained from records made accessible by the Farmers Union Marketing association of that city. These records gave detailed information concerning every load of grain hauled into the elevator for the crop year 1929-1930. A number of other elevators in the larger area also gave valuable data for their own market areas.

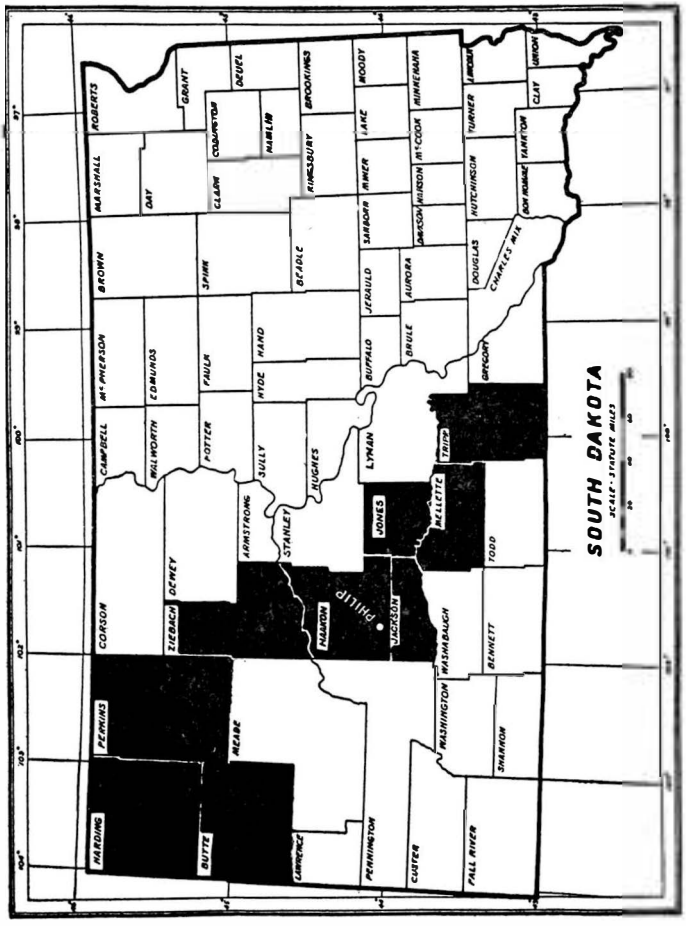

Fig. 1.—Map of South Dakota showing the nine counties included in this study. Location of the town of Philip is also indicated.

PART I GROWTH OF TRUCKING

Number and Sizes of Trucks in Area

A study of the growth in number of trucks in these nine South Dakota counties bring out some interesting facts.

Table 1 shows the number of trucks registered in each county for each year during the period 1923 through 1930. It will be apparent at once that these eight years have seen a tremendous increase in the number of trucks in this area. From a total of 749 in 1923 to a total of 2,926 in 1930 or an increase of 290.7 per cent. To those living in more densely populated areas the actual number of trucks may seem small, but to anyone familiar with the sparsely settled condition of parts of these western counties this will not be at all surprising.

TABLE 1.—Number of Trucks Licensed in Each County by Years From 1923-1930*

County	1923	1924	1925	1926	1927	1928	1929	1930
Butte	94	98	125	172	240	391	462	540
Haakon	87	102	112	127	152	204	236	247
Harding	42	45	93	112	150	188	205	220
Jackson†	23	32	47	74	96	151	172	218
Jones	42	30	49	32	60	100	111	128
Mellette	40	68	83	92	109	160	179	193
Perkins	60	83	106	145	230	351	433	492
Tripp‡	351	387	460	405	483	549	772	771
Ziebach	10	14	27	14	52	86	100	117
Nine counties	749	859	1,062	1,173	1,572	2,180	2,670	2,926
State total	10,536	11,215	13,887	14,445	16,585	20,393	22,748	25,047

* Taken from records of State Motor Vehicle Commission.
† Includes Washabaugh County.
‡ Includes Todd County.

Table 2 shows the percentage of farms having motor trucks in 1930 and in 1925. For 1930 the figures in Table 1 are corrected by an estimate of the percentage of trucks in the county actually owned and operated by farmers. It shows that in the case of every county the percentage of farms with trucks has increased during the last five years. In percentage gain the two northwest counties of Butte and Perkins lead with about 37 per cent and 23 per cent respectively. The smallest gain is by the southeastern county of Tripp. This may be explained by the fact that farming in the northwest part of the state is of comparatively recent origin and that a good road system is likewise of relatively recent growth. Generally speaking it may be said that whereas in this territory only about one-tenth of the farms were equipped with a motor truck in 1925, in 1930 about one-fourth of the farms were so equipped. This of course overlooks the fact that some farms may be equipped with more than one truck. While it is known that there are such cases the number is so small that it will not materially alter the percentages. It is somewhat significant to note that with the exception of the highest county and the lowest county in the study, the variation between all the counties is only about 10 per cent in 1930 though these counties represent a rather wide range of farming conditions.

Table 3 gives a better picture of the growth in the number of trucks in the counties during the period 1923 through 1930. Here the figures in Table

1 are converted to simple index numbers with 1923 representing 100 per cent. Taking Butte county as an example it will be seen that the index number in 1924 is 104.3. This means that there were 4.3 per cent more trucks in 1924 than in 1923. The index number for 1925 is 132.9. This means that there were 32.9 per cent more trucks in 1925 than in 1923. The increase in 1926 over 1923 was 82.9 per cent. In 1927 it was 155.3 per cent, in 1928, 315.9 per cent, etc. A study of this table will readily show the rapid and consistant growth in number of trucks in all the counties in-

TABLE 2.—Table Showing the Per Cent of Farms With Trucks in 1925 and 1930

County	Per Cent of All Trucks owned by Farmers (estimated)	Number of Farms		Per Cent of Farms With Trucks	
		1930	1925	1930	1925
Butte	93	982	879	51.1	14.2
Haakon	95	801	825	29.3	13.6
Harding	95	772	714	27.1	13.0
Jackson	95	944	776	21.9	6.1
Jones	90	530	550	21.7	8.9
Mellette	95	855	793	21.4	10.5
Perkins	95	1,502	1,276	31.1	8.3
Tripp	93	3,542	2,959	20.2	15.5
Ziebach	95	803	723	13.8	3.7
State		83,154	79,537	—	—

volved. There are of course times when the growth was slow or even negative (these will be more clearly shown in Table 4) but on the whole the trend in numbers has been upward. The index numbers for 1930 show an increase over 1923 of 474 per cent in Butte county, 184 per cent in Haakon county, 424 per cent in Harding county, 848 per cent in Jackson county, 205 per cent in Jones county, 328 per cent in Mellette county, 720 per cent in Perkins county, 120 per cent in Tripp county and 1070 per cent in Ziebach county.

It is especially interesting to note that the rate of growth in these western counties has been considerably faster than that of the state as a whole. The index for the nine counties shows an increase of about 15 per cent in 1924 compared with 1923, while the state as a whole increased only 6 per cent. By 1925 the nine counties had increased 42 per cent while the state as a whole had increased 32 per cent; by 1926 the comparison was 57 per cent to 37 per cent; by 1927 the nine counties had increased 110 per cent, while the state as a whole had increased only 58 per cent. By 1930 the nine counties had increased 291 per cent, while the state as a whole had increased 138 per cent. It will also be noted that while there are times

TABLE 3.—Table Showing Index of Change in Number of Trucks in Each County, 1923=100 Per Cent

County	1923	1924	1925	1926	1927	1928	1929	1930
Butte	100	104.3	132.9	182.9	255.3	415.9	491.4	574.4
Haakon	100	117.2	128.7	145.9	174.7	234.4	271.2	283.9
Harding	100	107.1	221.4	266.6	357.1	447.6	488.0	523.8
Jackson	100	139.1	204.3	321.7	417.3	656.5	747.8	947.8
Jones	100	71.4	116.6	76.2	142.8	238.0	264.2	304.7
Mellette	100	170.0	207.5	230.0	272.5	400.0	447.5	482.5
Perkins	100	138.3	176.6	241.6	283.3	585.0	721.6	820.0
Tripp	100	110.2	131.1	115.3	137.6	156.4	219.9	219.6
Ziebach	100	140.0	270.0	140.0	520.0	860.0	1,000.0	1,170.0
Nine counties	100	114.6	141.7	156.6	209.8	291.0	356.4	390.6
State	100	106.4	131.8	137.1	157.4	193.5	215.9	237.7

when the index of a particular county falls, the index for the nine counties moves consistantly upward.

For those who may be interested in the year to year change in number of trucks in the various counties, Table 4 is included. This table shows the change in per cent from one year to the next in each of the nine counties, for all nine counties combined, and for the entire state. Thus the figures in the column for 1924 are the percentage change over 1923, the figures under 1925 the percentage change over 1924, etc. The years 1927 and 1928 seem to show large increases in most of the counties, and are the years that register the largest increases in all the counties combined.

TABLE 4.—Year to Year Percentage Changes in the Number of Trucks Registered in Nine Counties in Western South Dakota

County	1923	1924	1925	1926	1927	1928	1929	1930	1923 to 1930
Butte	----	+ 4.3	+ 27.6	+ 37.6	+ 39.5	+ 62.9	+ 18.2	+ 16.9	+ 474.4
Haakon	----	+ 17.2	+ 9.8	+ 13.4	+ 19.7	+ 34.2	+ 15.7	+ 4.7	+ 183.9
Harding	----	+ 7.1	+ 106.6	+ 20.4	+ 33.9	+ 25.3	+ 9.0	- 7.3	+ 423.8
Jackson	----	+ 39.1	+ 46.8	+ 57.4	+ 29.7	+ 57.3	+ 13.9	+ 26.7	+ 847.8
Jones	----	- 28.5	+ 63.3	- 34.6	+ 87.5	+ 66.7	+ 11.0	+ 15.3	+ 204.7
Mellette	----	+ 70.0	+ 22.1	+ 10.8	+ 18.5	+ 46.9	+ 11.9	+ 7.8	+ 382.5
Perkins	----	+ 38.3	+ 27.7	+ 36.8	+ 58.6	+ 52.6	+ 23.4	+ 13.6	+ 720.0
Tripp	----	+ 10.3	+ 18.9	- 12.0	+ 19.3	+ 13.7	+ 40.6	- 00.1	+ 119.7
Ziebach	----	+ 40.0	+ 92.9	- 48.1	+ 271.4	+ 65.4	+ 16.3	+ 17.0	+ 1,070.0
Nine counties	----	+ 17.7	+ 23.6	+ 10.5	+ 34.0	+ 38.7	+ 22.4	+ 9.6	+ 290.7
State	----	+ 6.4	+ 23.8	+ 4.0	+ 14.8	+ 23.0	+ 11.5	+ 10.1	+ 137.7

NOTE: A plus sign shows an increase while a minus sign shows a decrease.

Table 5 deals with the sizes of trucks in the nine counties during the period 1925 through 1930. These figures indicate that the most popular size truck in this territory is one that is over one ton and under two tons in capacity. It is significant to note, however, that the trend in trucks is toward the larger sizes. The percentage of the total represented by the trucks listed "one ton and under" has been steadily decreasing since 1925. The popular ton and half truck (includes over one ton and under two tons) apparently gained a little until 1929 in percentage of the total but has declined sharply during the past two years. However, it still constitutes about 63 per cent of the total number of trucks. The percentage of the two-ton size, on the other hand, after remaining virtually stationary during the first four years has gained rapidly in the last two years. The same is true for the three-ton size. While this is a tendency that one would expect in a comparatively new country with a constantly improving road

TABLE 5.—Number and the Proportions of Various Sizes of Trucks in the Nine Counties Included in the Study

Year	Number in Each Size				Total	Per Cent of Total in Each Size			
	1T	1½T	2T	3T		1T	1½T	2T	3T
1925	130	804	34	8	976	13.3	82.4	3.5	.8
1926	113	880	43	2	1,038	10.9	84.8	4.1	.2
1927	124	960	39	1	1,124	11.0	85.4	3.5	.1
1928	146	1,464	51	30	1,691	8.6	86.6	3.0	1.8
1929	147	1,651	201	51	2,050	7.2	80.5	9.8	2.5
1930	104	1,148	510	62	1,824	5.7	62.9	28.0	3.4
Total (all years)	764	6,907	878	154	8,703	8.8	79.4	10.1	1.7

system, care must be exercised in drawing any very definite conclusions because of the short period for which figures are available and the especially short period that has elapsed since any significant change has taken place. It should be noted likewise that these data do not separate farm trucks from trucks used for other purposes, and that because of this fact the tendency shown may not portray correctly the change in sizes of trucks used by farmers.

PART II TRUCKING OF GRAIN IN THE PHILIP AREA

Description and Reasons for Choice of This Area

As will be noted in Figure 2, Philip is located in the southern part of Haakon county on the Chicago and Northwestern railroad. Referring to Figure 1 it will be observed that this is about the central part of the territory west of the Missouri river. The surrounding market area is largely confined to Haakon and Jackson counties but it will be noted later that grain is hauled to Philip from surprisingly long distances.

In considering Philip as a "typical" market area there are some factors that must be carefully borne in mind. The first of these is the location of the farming area from which Philip draws its grain. In Figure 2 it will be observed that the best developed farming territory of Haakon county is near the northern and western parts of the county, a long distance from the local market. This is partly due to soil and topographical conditions and perhaps also to rainfall variations. It is not to be expected that other towns will have an exactly similar situation, but of course local peculiarities would probably rise for whatever town one chose to consider. In the second place it must be noted that there are few competing markets close to Philip. While this is true of many other towns in the area, there are others where neighboring towns are much closer.

On the other hand, there is no reason to believe that the facts brought out in this study with regard to the agency hauling the grain, the size of loads, etc. should not be typical of much of this western territory and it is largely in the belief that this is true that the study was undertaken.

A brief review of some of the agricultural data from the 1930 U. S. agricultural census of Haakon county may help to give readers not familiar with this territory a better idea of the territory. Tables 6, 7 and 8 are included for this purpose.

It will be readily noted that grazing is still an important enterprise in this county. Cattle and hogs in livestock enterprises and wheat, barley, flax and corn in crop enterprises are the chief sources of income.

The type of farming is much the same in Jackson county. It is a smaller county in area, crop acreage and production. The part of Jackson county tributary to Philip is somewhat more rugged and perhaps, at times, a little more arid than some of the northwestern farming area in Haakon county.

Data for the crop year 1929-1930 upon which this portion of the study is based were secured from one of the two grain elevators located at Philip. This elevator handled about one-half of the business. Hauling records from 307 farmers were included in the study.

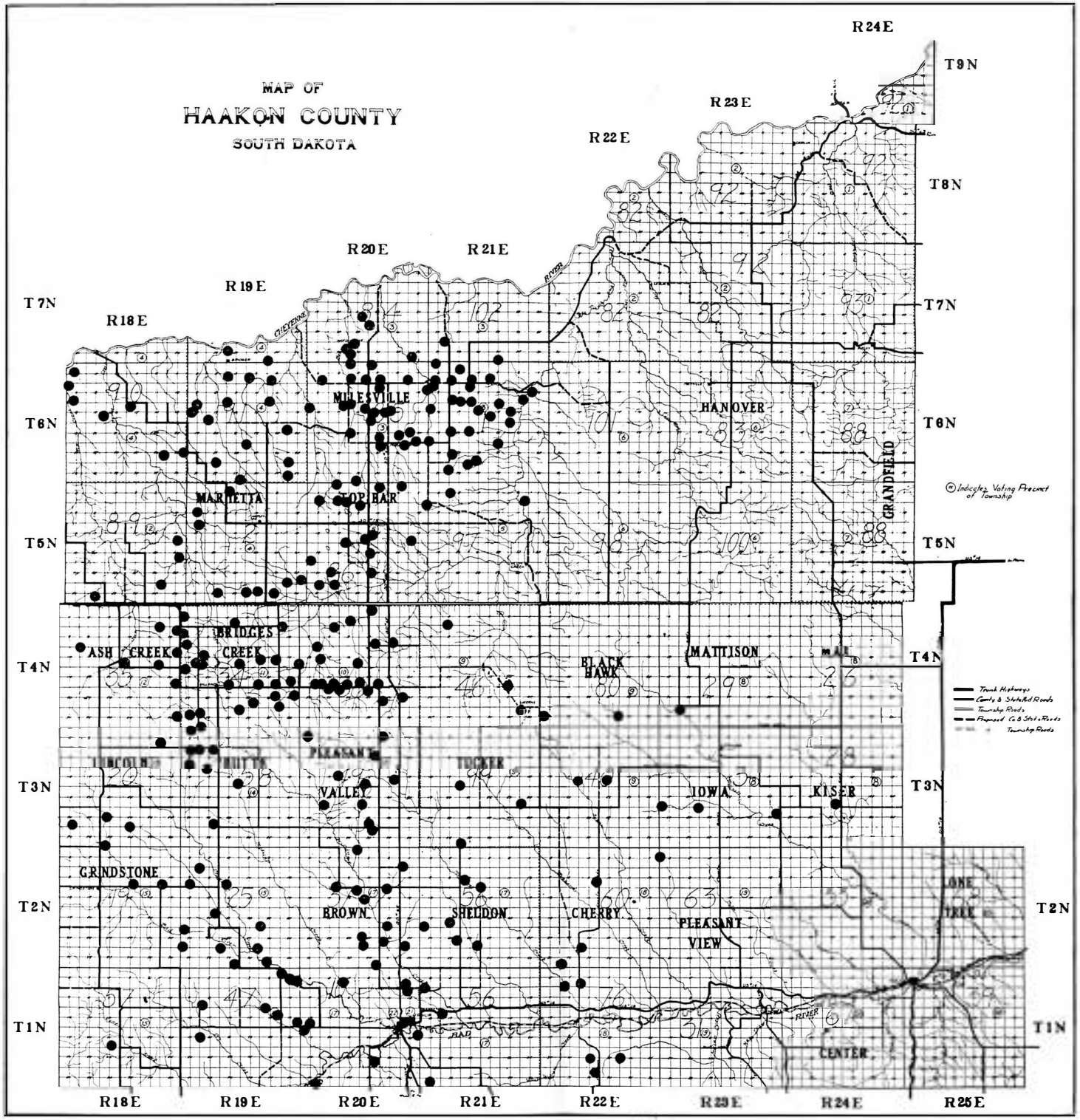

Fig. 2.—Map of Haakon County showing the location of farmers covered by the study who live in this county and hauled grain into Philip. The location of Philip is also shown.

Weight of Loads and Distance Hauled

Table 9 shows the total number of loads of various weights and the percentage of the total that the number constitutes. It will be readily seen that the most popular sized load is one of from 3600 to 4100 pounds. There were 529 loads, or 19 per cent of the total in this weight.

TABLE 6.—Census Data on Farm Acreage and Number of Farms in Haakon County

Farm Acreage and Number of Farms	1930	1925	1920
Number of farms	801	825	819
Acreage of all land in farms	755,252	631,409	698,391
Average acres per farm	942.9	765.3	852.7

TABLE 7.—Census Data on Acreage and Production of Selected Crops in Haakon County

Selected Crops	Acreage		Unit	Production	
	1929	1924		1929	1924
Corn harvested for grain	18,801	12,544	Bu.	205,859	144,741
Oats threshed for grain	6,421	6,379	Bu.	107,787	107,157
Wheat	24,655	10,787	Bu.	316,709	101,009
Barley	19,817	4,318	Bu.	316,912	56,213
Rye	831	780	Bu.	8,138	6,745
Flaxseed	8,574	988	Bu.	36,275	3,704
Hay	64,731	93,018	T.	49,223	48,660

TABLE 8.—Census Data on Livestock Numbers in Haakon County

	Number	
Livestock	1930	1920
Horses	6,592	14,603
Mules	154	126
Cattle	32,082	50,200
Milk cows	4,516	3,474
Hogs	11,615	6,907
Chickens	44,880	31,392

TABLE 9.—Distribution of Loads of Grain Hauled According to Load Weight, and the Percentage of the Total Number of Loads in Each Weight Group

Load Size	Total Number of Loads	Per Cent of Total
Under 1000	164	6.0
1000-1599	97	3.6
1600-2099	119	4.3
2100-2599	199	7.4
2600-3099	405	14.8
3100-3599	385	14.2
3600-4099	529	19.4
4100-4599	448	16.4
4600-5099	202	7.4
5100-5599	58	2.2
5600-6099	38	1.4
6100-6599	22	.8
6600-7099	39	1.4
7100-7599	17	.6
7600-over	2	.1
Total	2,724	100.0

Table 10 shows the total number of loads coming from various distances and the percentage of the total coming from each distance group. The distance of greatest frequency is from 31 to 35 miles from which 619 loads were hauled, constituting 23 per cent of the total.

TABLE 10.—Distribution of Grain Loads by Distance Hauled and the Per Cent of the Total Coming From Various Distances

Miles Hauled	Number of Loads	Per Cent of Total
Up to 11	542	19.9
11 through 15	224	8.2
16 - 20	186	6.8
21 - 25	371	13.6
26 - 30	335	12.4
31 - 35	619	22.8
36 - 40	288	10.6
41 - 45	51	1.9
46 - 50	56	2.0
51 - 55	1	0.0
56 - 60	15	.5
Over 60	36	1.3
Total	2,724	100.0

These two factors—weight of load, and distance hauled—are brought together in Table 11 which shows the distribution by weight and by distance hauled, of the same 2724 loads of grain hauled into the elevator at Philip during the year 1929-30. Thus by referring to the first line of the second column of Table 11 it is seen that 40 loads of under 1000 pounds came from a distance up to 11 miles. Nineteen loads of the same weight came from a distance of 11 to 15 miles inclusive. Very small loads of grain that could have been hauled as a part of some other load were eliminated from the tabulations. Some of the loads in the shorter distance groups were probably brought in by team and wagon. These are not eliminated in the tabulation.

The table shows that the size of load most frequently hauled was one of from 3600 to 4099 pounds. This weight includes 19.4 per cent of all loads studied. The weight group of from 4100 pounds to 5000 pounds follows rather closely with 16.4 per cent of the total loads. Beyond 5000 pounds the per cent of the total number of loads in each group falls very rapidly. Loads of from 2600 pounds to 3100 pounds constitute about 15 per cent of the total and loads of from 3100 pounds to 3600 pounds constitute about 14 per cent of the total. Thus 64.7 per cent of the total loads hauled fall within the weight limits of 2600 to 4600 pounds.

It will be observed that practically all of the very heavy loads (6600 pounds and above) came from short distances of under 20 miles with the greatest number under 11 miles. Otherwise, however, there seems to be little relationship between the weight of the load and the distance hauled. The possible exception to this statement is that there are fewer very light loads as the distance increases.

It will also be observed that the load of greatest frequency, is one that is between 3600 and 4100 pounds and travels a distance of from 31 to 35 miles inclusive. This group is indicated by the place where the horizontal and vertical lines cross each other in Table 11, showing 180 loads the highest number for any size of load and for any distance.

In interpreting this table it must be remembered that the figures recorded are in number of loads hauled, and therefore the light loads and the heavy loads are given equal importance, whereas a man with a truck capable of hauling 5000 pounds to a load makes only one trip for every two that the man with a 2500 pound truck must make. The purpose however, is only to show the frequency of the various sizes of loads according to the distance hauled.

TABLE 11.—Distribution by Weight of Load and by Distance Hauled of 2,724 Loads of Grain Hauled to Philip in Year 1929-30

Load Size (pounds)	DISTANCE HAULED												Total Number of Loads	Per Cent of Total
	11 miles or Less	11-15 Miles	16-20 Miles	21-25 Miles	26-30 Miles	31-35 Miles	36-40 Miles	41-45 Miles	46-50 Miles	51-55 Miles	56-60 Miles	Over 60 Miles		
Under 1000	40	19	16	44	16	16	10	2	1	0	0	0	164	6.0
1000-1599	17	12	5	22	23	11	5	2	0	0	0	0	97	3.6
1600-2099	28	11	3	21	23	21	10	1	0	0	1	0	119	4.3
2100-2599	53	11	18	48	15	34	14	5	0	0	1	0	199	7.4
2600-3099	72	27	21	100	78	50	44	11	2	0	0	0	405	14.8
3100-3599	71	23	24	50	61	105	32	8	6	0	2	3	385	14.2
3600-4099*	77	27	32	40	54	180	73	7	21	0	4	14	529	19.4
4100-4599	55	13	24	27	49	175	61	13	21	0	1	9	448	16.4
4600-5099	63	38	20	12	16	16	23	1	3	0	0	10	202	7.4
5100-5599	14	13	14	7	0	3	6	0	0	1	0	0	58	2.2
5600-6099	16	6	3	0	0	6	3	0	0	0	4	0	38	1.4
6100-6599	12	3	0	0	0	2	3	0	0	0	2	0	22	.8
6600-7099	18	12	4	0	0	0	4	0	1	0	0	0	39	1.4
7100-7599	6	7	2	0	0	0	0	1	1	0	0	0	17	.6
7600-over		2											2	.1
Total No. of loads	542	224	186	371	335	619	288	51	56	1	15	36	2,724	
Per cent of total	19.9	8.2	6.8	13.6	12.4	22.8	10.6	1.9	2.0	.0	.5	1.3	100	100.0

* Groups of highest frequency.

Figure 2 shows the approximate location of farmers living in Haakon county whose hauling operations were studied. Those living in other counties are not shown. The distances that grain is brought to Philip range from 1 to 82 miles. Table 12 shows that 4 men were hauling grain over 60 miles, and 4 more between 56 and 60 miles. The largest group in Table 12 is those hauling from 31 to 35 miles. The per cent of the total number studied that live in each distance group is also shown in Table 12. Thus 17.2 per cent of the total live 31 to 35 miles from town. There are 7.5 per cent of the total number living beyond 40 miles from Philip.

The 307 farmers studied have an average distance to town of 25.2 miles. When the distance hauled is weighted by the amount of grain hauled the average becomes 26 miles. This 26 miles represents the arithmetic average of the distance grain moves to Philip.

Referring back to Table 11 we find that the most frequent haul is from 31 to 35 miles and a total of 22.7 per cent of the loads are hauled this distance. This percentage is slightly larger than the per cent of farmers that fall in this distance group. Of the loads hauled 5.7 per cent come from more than 40 miles away. This is a somewhat smaller percentage than the number of farmers living in this distance group, which might indicate that persons coming from long distances were more casual patrons in the Philip area.

TABLE 12.—Table Showing the Number and the Per Cent of the Total Number of Farmers Living in Each Distance Group

Distance (miles)	Number of Farmers	Per Cent of Total
0 - 5	11	3.5
6 - 10	39	12.7
11 - 15	34	11.4
16 - 20	25	8.1
21 - 25	45	14.6
26 - 30	42	13.7
31 - 35	53	17.2
36 - 40	34	11.4
41 - 45	10	3.0
46 - 50	5	1.6
51 - 55	1	.3
56 - 60	4	1.3
Over 60	4	1.3
Total	307	100.0

Agencies Hauling Grain

A study of "who hauls the grain" brings many interesting facts to light. There are a number of possibilities in classifying the haulers of grain. In this study the grain hauled has been divided into three classes, namely, (1) self hauled, (2) commercial hauled, (3) others.

Each of these classes needs a word of explanation. South Dakota has a law requiring truckers who haul for hire to obtain a permit from the state Board of Railroad Commissioners and to abide by their regulations. The class "commercial hauled" includes grain hauled only by such truckers. More details regarding this class of truckers will be given later. The "self" group, as the name indicates, is intended to cover grain hauled by the farmer himself and by members of his family.

The "others" group covers all cases where the surname of the hauler was not the same as that of the owner and where the hauler had no permit to truck for hire. It probably includes such cases as hauling by neighbors, or the fairly common system of "trading work", etc. While there is a possibility that there are cases of hauling for hire without a permit and hence illegal, the author has no information or evidence that this is so.

Table 13 shows the number of pounds of grain coming from various distances that were hauled by the different methods described above. It will be noted that the largest amounts come from a distance of from 21 to 40 miles. For the purpose of understanding the transportation problem involved we must consider the distance hauled as well as amount of grain hauled. Table 14 deals with this problem.

TABLE 13.—Pounds of Grain Hauled Various Distances by the Different Hauling Agencies

Miles Hauled	Self Hauled (by farmer himself)	Commercial Hauled (by trucker with permit)	Hauled by Others (anyone except commercial or self hauled)
	(pounds)	(pounds)	(pounds)
0– 5	181,340	289,030	51,110
6–10	534,697	645,180	200,110
11–15	242,657	495,558	79,783
16–20	309,902	204,150	165,270
21–25	652,475	239,840	150,710
26–30	630,874	321,100	150,460
31–35	1,421,752	448,102	680,540
36–40	561,170	267,530	195,330
41–45	151,397	9,660	7,060
46–50	216,950	------	10,020
51–55	5,120	------	------
56–60	54.020	------	11,660
Over 60	152,590	------	------
Total	5,114,944	2,920,150	1,702,053

Table 14 shows the actual pound-miles of grain hauled from various distances by the three classes of truckers for the 307 farmers included in the study. A "pound-mile" is an expression used to describe the hauling of one pound a distance of one mile. Since both weight and distance are important in trucking they are combined for this analysis in the same

TABLE 14.—Pound–Miles of Grain Hauled Various Distances from 307 Farms into the Elevator at Philip

Distance Zone	Self Hauled	Commercially Hauled	Other	Total
(Miles)	(pound-miles)	(pound-miles)	(pound-miles)	(pound-miles)
0– 5	744,180	1,271,120	196,760	2,212,060
6–10	4,033,029	4,797,570	1,665,635	10,496,234
11–15	3,200,524	5,987,360	1,040,425	10,228,309
16–20	5,711,610	3,780,950	2,928,790	12,421,350
21–25	15,402,650	5,664,770	3,100,050	24,167,470
26–30	17,897,904	8,839,500	4,133,340	30.870,744
31–35	47,007,445	14.935,986	22,331,560	84,274,991
36–40	20,791,320	10,099,230	7,176,300	38,066,850
41–45	6,621,845	408,240	509,060	7,539,145
46–50	10,501,460	------	480,960	10,982,420
51-55	281,600	------	------	281,600
56-60	3,241,200	------	699,600	3,940,800
Over 60	11,737,190	------	------	11,737,190
Totals	147,171,957	55,784,726	44,262,480	247,219,163
Per cent of total	59.5	22.6	17.9	100.0

way as railroads study their traffic in terms of "ton-miles" hauled. The smaller unit or "pound-mile" is used in this study, however. From this explanation it will be seen that a 1000 pound load hauled 20 miles will give the same result in the table as 2000 pounds hauled 10 miles. The size of these pound-mile figures have little or no meaning in themselves, but they show some interesting things when compared with one another. For convenience in comparison the table is divided into distance zones from Philip as a center.

The first thing that one observes is that there is no hauling by commercial truckers over 45 miles. Since the rate for this distance would be over 24 cents per cwt., according to the uniform rate schedule which is discussed later in this bulletin, it is easy to see why this is so—the expense of hauling becomes too heavy, except when prices are unusually favorable, and then only for high value grain. The high figures in the long distance groups in Table 14 are the result of long distance rather than much grain, while the opposite is true for the shorter distances.

It is interesting to note that 59.5 per cent of all pound-miles were hauled by the farmer himself. Commercial haulers handled 22.6 per cent and other haulers 17.9 per cent of the total pound-miles hauled. It is a little difficult to reconcile these figures with those showing that less than half of the farms have trucks unless one can assume that those farms having trucks produce the bulk of the grain. This would seem to be a logical assumption, at least within certain limits. Another problem entering in for which there may not be adequate correction is the amount of hauling done by horses, especially from nearby distances.

It is easier to see the relationships involved in Table 14 when the pound-miles of grain hauled are reduced to percentage form. Table 15 shows the per cent of the total hauling by each agency in terms of pound-miles which comes from various distance zones. The first column is for " self" hauled grain, the second for "commercial" hauled grain and the third for "others". Thus .5 per cent of all pound-miles of grain hauled by farmers themselves came from the 0-5 mile zone. Two and three-tenths per cent of all pound-miles of grain hauled by commercial haulers came from this same zone.

TABLE 15.—Per Cent of Total Pound-Miles of Grain Hauled by Each Type of Hauler that Falls into Each Distance Zone

Distance Zone (miles)	Per Cent of Self Hauled	Per Cent of Commercially Hauled	Per Cent of Hauled by Others
0– 5	.5	2.3	.4
6–10	2.7	8.6	3.8
11–15	2.2	10.7	2.4
16–20	3.9	6.8	6.6
21–25	10.5	10.2	7.0
26–30	12.2	15.9	9.3
31–35	31.9	26.8	50.5
36–40	14.1	18.1	16.2
41–45	4.5	.7	1.2
46–50	7.1	—	1.1
51–55	.2	—	—
56-60	2.2	—	1.6
Over 60	8.0	—	—
Total	100.0	100.0	100.0

The hauling by commercial or permit haulers in the nearby zones constitutes a greater percentage of their total hauling than is true of either of the other groups. This is clearly indicated by the fact that while 28.4 per cent of all the pound-miles of grain hauled by commercial truckers comes from within 20 miles, only 9.3 per cent of " self hauled" grain and 13.2 per cent of the group "other hauled" comes from this distance.

It will also be observed here as elsewhere that there is no commercial hauling beyond 45 miles. Over 50 per cent of the pound-miles of grain hauled by "others" comes from a distance of from 31 to 35 miles inclusive. With such a long haul and with necessity for rapid marketing where storage facilities are lacking, it is perhaps quite natural for farmers to "club together" in their grain hauling operations.

Some of these relationships can be more clearly visualized when the information is put in the form shown in Table 16. This table shows the per cent of the pound-miles of grain hauled by each of the three agencies for each distance zone. Thus about 34 per cent of all pound-miles of grain hauled a distance of 0-5 miles is hauled by the farmer himself, while about 57 per cent is hauled by commercial truckers and about 9 per cent by "others". In the 6-10 mile zone 38 per cent is hauled by farmers themselves, about 46 per cent by commercial haulers and about 16 per cent by others. Here it will be clearly seen that the permit hauler is the most important agent for hauling in distances up to 16 miles.This agency hauls 57 per cent, 46 per cent and 58 per cent respectively of the pound-miles of grain in each of these first three distance groups. This is a somewhat surprising situation which appears difficult to explain satisfactorily. A possible explanation is that this area constitutes the bulk of the land leased and farmed by non-residents who do not live on their places and who do not own their own trucks.

From a distance of 16 miles and farther the hauling by the farmer himself constitutes by far the largest per cent of the total in each distance group. The hauling by "others" appears to have no definite trend. In only one place, that is from 31-35 miles, does it become significantly greater than that of permit hauling. It is significant to note, however, that this agency persists into the longer hauls more than commercial hauling by permit truckers. Possible reasons for this have already been mentioned.

TABLE 16.—Table Showing the Per Cent of the Total Pound-Miles of Grain Hauled from Each Distance Zone by Each Type of Hauler

Distance Zone (miles)	Per Cent of Group Hauled by Self	Per Cent of Group Commercially Hauled	Per Cent of Group Hauled by Others
0– 5	33.6	57.5	8.9
6–10	38.4	45.7	15.9
11–15	31.2	58.5	10.2
16–20	46.0	30.4	23.6
21–25	63.7	23.4	12.8
26–30	58.0	28.6	13.4
31–35	55.7	17.7	26.5
36–40	54.6	26.5	18.8
41–45	87.8	5.4	6.7
46–50	95.6	----	4.4
51–55	100.0	----	----
56–60	82.0	----	17.7
Over 60	100.0	----	----

The problem can be viewed from still another angle. In Table 17 is shown the per cent of the total that each type of hauler has hauled from each distance zone. Thus .3 per cent of all the pound-miles of grain moved is hauled by farmers themselves from a distance of from 0-5 miles. One and six-tenths per cent of all the pound-miles of grain is hauled by the farmer himself from a distance of 6-10 miles, etc. About one-fifth or 19 per cent of all the pound-miles of grain moved is hauled by the farmer himself from a distance of 31-35 miles from Philip. When one remembers that this is simply the haul to the local market, he realizes the importance of transportation costs in the growing and marketing of crops in this large area of the state. When one adds the 6 per cent hauled by commercial truckers and the 9 per cent hauled by "others" from this same distance the local transportation problem becomes even more significant.

TABLE 17.—Table Showing the Per Cent of Total Pound-Miles of Grain Hauled by Each Agency From Each Distance Zone

Distance zone (miles)	Per Cent of Total Self Hauled	Per Cent of Total Commercially Hauled	Per Cent of Total Hauled by Others
0– 5	.3	.5	.1
6–10	1.6	1.9	.7
11–15	1.3	2.4	.4
16–20	2.3	1.5	1.2
21–25	6.2	2.3	1.2
26–30	7.2	3.6	1.7
31–35	19.0	6.0	9.0
36–40	8.4	4.1	2.9
41–45	2.7	.2	.2
46–50	4.2	----	.2
51–55	.1	----	----
56–60	1.3	----	.3
Over 60	4.7	----	----

PART III COMMERCIAL HAULING

Area Covered

In the previous section it was made evident that commercial hauling is only a part of the problem of truck transportation. This section of the present study, while farm from being complete, presents some interesting data on this new and growing phase of truck transportation.Facts concerning the extent and proportions of commercial hauling are brought out in the study of the Philip market area. Some facts regarding commercial hauling covering the larger area of nine counties shown in Figure 1 of this bulletin will be discussed in this section. This area represents a cross section of the farming and grazing area of western South Dakota.

Regulation of Motor Carriers[2]

The laws relating to public utilities in South Dakota provide for the regulation of motor vehicle carriers by the state Board of Railroad Commissioners, and it is from their records that most of the material discussed in this section was obtained. The law provides that anyone who does hauling "for hire" or for "compensation" (except such as are specifically ex-

2. See Chapter 224, Session Laws of 1925 as amended.

cluded) must obtain a permit from the state to conduct his business, and he must comply with the provisions of the law.

The law also provides for control by the railroad commissioners of the rates charged by the trucker for hauling done for the general public. Another provision prohibits any personal or local discrimination or rebating. This means that truckers are forbidden to charge one person or place more than another for an identical service.

Another provision of the law calls for a "compensation" for the use of the public highways, in addition to the regular license fees or taxes imposed on motor vehicles. The "compensation" for motor vehicles with a class B permit is 3 per cent of the gross earnings of such carrier (providing they have pneumatic or semi-pneumatic tires).

A class B carrier is one that operates under regular charges but not between fixed terminals or over a regular route. This is the only class of carrier investigated in this study.

From the records of these payments made to the state for the use of the public highway it is possible to make an estimate of the gross earnings of motor carriers that fall within the provisions of the act. From the issuing, transferring, revoking and cancelling of permits it is also possible to obtain data on the length of time that the commercial trucker has remained in business.

The newness of the business, the rapid growth of truck transportation, the lack of experience in this type of regulation and the lack of adequate personnel for strict enforcement has probably at times led to violations of the law. In the absence of any proof of such cases this study assumes that the provisions of the law have been properly complied with.

Growth and Progress

The recent development of this type of transportation in South Dakota with the natural result that it has not as yet become firmly established on a sound business basis is clearly evident from a study of the average business life of the "permit" hauler. During the period 1925 to 1930 covered by this study 382 truckers obtained "permits" in the nine counties considered. Of these 382 truckers, 244 went out of business before the five year period was over either by transferring or cancelling their permits or by having them revoked. This is a mortality rate of 64 per cent during the five year period.

The rapid growth of the business may be readily seen from the following figures. In 1925 there were 14 "permit" truckers in the nine counties. In 1926 there were 50 new permits issued, in 1927 there were 93, in 1928 there were 122, in 1929 there were 103, and in 1930 there were 62 new permits issued. These figures are shown in Table 19 and in Figure 3.

It is apparent that there was little uniformity of ideas as to the proper rates to charge in this new business when it was first started. A few examples are given here to show the wide diversity of opinion regarding rates. These examples are taken from rate schedules filed by individual truckers with the Board of Railroad Commissioners.

At Winner, South Dakota trucker "A" filed a rate of 1 cent per cwt. per mile. Trucker "B" filed a rate of 1½ cent per cwt. per mile up to 4

miles, 1¼ cent for 4 to 8 miles and 1 cent for over 8 miles. At Murdo trucker "A" filed rates of 1 cent per cwt. per mile on livestock and grain up to 10 miles. Over ten miles ¼ cent less on grain. Trucker "B" filed 1½ cent per cwt. per mile for less than 10 miles and 1 cent per cwt. per mile over 10 miles. At Belle Fourche trucker "A" filed 1 cent per cwt. per mile with a minimum of $2.00. Trucker "B" filed 20 cents per mile on graveled roads and 25 cents per mile on earth roads. At Lemmon trucker "A" filed 1 cent per cwt. per mile with a minimum charge of $1.00. Trucker "B" filed one-third cent per cwt. per mile. These examples could be multiplied considerably and show many more variations in rates filed.

However, uniform rates were worked out by the Board of Railroad Commissioners in cooperation with the truckers. These rates went into effect on July 1, 1930. Table 18 gives the new rates on grain for distances up to 40 miles.

TABLE 18.—Grain Rates as Established by the South Dakota Board of Railroad Commissioners for Motor Carrier Transportation in the Area West of the Missouri River. These Rates Apply on Loads Weighing 4000 Pounds or Over

Miles	Cents Per Cwt.	Miles	Cents Per Cwt.
1	4	26	18½
2	4	27	19
3	4	28	19½
4	4	29	20
5	5	30	20½
6	6	31	20¾
7	6¾	32	21
8	7½	33	21¼
9	8¼	34	21½
10	9	35	21¾
11	9¾	36	22
12	10½	37	22¼
13	11¼	38	22½
14	12	39	22¾
15	12¾	40	23
16	13½	41	23¼
17	14	42	23½
18	14½	43	23¾
19	15	44	24
20	15½	45	24¼
21	16	46	24½
22	16½	47	24¾
23	17	48	25
24	17½	49	25¼
25	18	50	25½

Table 19 shows the length of business life of the "Class B Permit" truckers over the period of the study. Beginning in 1925 there were 14 truckers in the nine counties. During 1926, four of these dropped out. During the same year 50 new ones started. In 1927 of the ten that were left (of those starting in 1925) two more dropped out. Of the 50 that started in 1926, 11 dropped out. Ninety-three new ones started in 1927. In 1928 of the eight that were left (of those starting in 1925) one more dropped out. The remaining seven continued in business throughout the rest of the period. Of the 39 left from those starting in 1926 there were 14 who dropped out in 1928. Of the 93 who started in 1927 there were 36 who dropped out in 1928. One-hundred and twenty-two new ones started in 1928. Reference to Table 19 will show what happened during the remainder of the period. Figure 3 shows the same data in the form of a graph. The first group of five bars shows the history of those truckers who began business in 1925. The next four show those who began in 1926,

etc. The shaded portion of each bar shows the number that dropped during the year while the unshaded portion shows the number that continued.

TABLE 19.—Business Life of Class B Permit Haulers in Nine Counties of Western South Dakota, 1925-1930

Year Starting	Number Starting	1926		1927		1928		1929		1930		Total	
		Dropped Out	Continued	Dropped Out	Continued	Dropped Out	Continued	Dropped Out	Continued	Dropped Out	Continued	Dropped Out	Continued
1925	14	4	10	2	8	1	7	0	7	0	7	7	7
1926	50	-	—	11	39	14	25	8	17	5	12	38	12
1927	93	-	—	—	—	36	57	17	40	15	25	68	25
1928	122	-	—	—	—	—	—	53	69	26	43	79	43
1929	103	-	—	—	—	—	—	—	—	52	51	52	51
1930	62	-	—	—	—	—	—	—	—	—	—	—	62
Totals	444	4	10	13	47	51	89	78	133	98	138	244	200

Table 20 gives the business mortality of truckers in terms of the percentage of those starting in a given year who dropped out or continued in business in succeeding years. Thus of those class B permit haulers who started out in 1925 there were 28 per cent discontinued by the end of one year, 43 per cent by the end of two years, 50 per cent by the end of three years. Of those starting in 1926 there were 22 per cent discontinued by the end of one year, 50 per cent by the end of two years, 66 per cent by the end of three years and 76 per cent by the end of four years. Of those beginning in 1927 there were 39 per cent discontinued by the end of one year, 57 per cent by the end of two years and 73 per cent by the end of three years. Of those beginning in 1928 there were 43 per cent discontinued by the end of one year and 65 per cent by the end of two years. Of those starting in 1929 there were 50 per cent discontinued by the end of one year.

This heavy mortality rate in the trucking business is probably due to two main causes. First, as previously indicated, the business is very new. The truckers lack a basis of experience upon which to base a fair rate structure. In the second place, many of the truckers have taken up this business as a side-line enterprise, engaging in it only during slack seasons in their regular work or taking only such business as was voluntarily offered. The sharp competition brought on by many truckers entering the field undoubtedly made it unprofitable for a large number of them to continue. The study of earnings which follows brings this fact out more clearly.

Earnings of Commercial Truckers

As previously indicated, the gross earnings tax of 3 per cent may serve as a basis for study of the earnings of truckers. It is quite reasonable to suppose that the earnings figure computed by capitalizing this tax will be a minimum figure which will be below actual earnings only insofar as those who declare their earnings are dishonest and do not comply with the law. However, it is quite reasonable to assume that comparative data

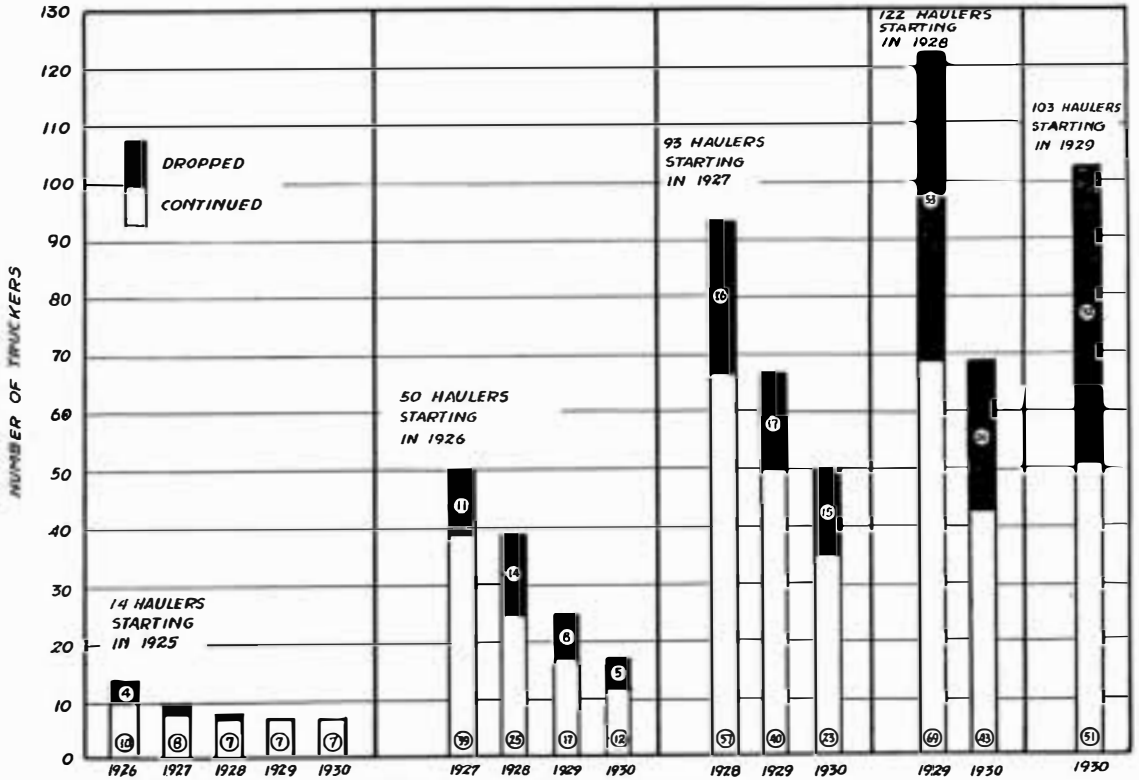

Fig. 3.—Business life of "Class B" permit haulers in nine counties in western South Dakota.

TABLE 20.—Business Mortality of Class B Permit Haulers in Terms of the Percentage of Those Starting Each Year Showing the Percentage Dropping Out of Business and the Percentage Continuing

Years Started	Per Cent Dropped				
	1 Year After Starting	2 Years After Starting	3 Years After Starting	4 Years After Starting	5 Years After Starting
	%	%	%	%	%
1925	28	43	50	50	50
1926	22	50	66	76	—
1927	39	57	73	—	—
1928	43	65	—	—	—
1929	50	—	—	—	—
Year Started	**Per Cent Continued**				
1925	71	57	50	50	50
1926	78	50	34	24	—
1927	61	43	27	—	—
1928	57	35	—	—	—
1929	50	—	—	—	—

of one area with another and probably one year with another will be quite free from bias of this type.

It may be well to note here that the earnings data here shown are given in quarters because the law requires that the trucker declare his earnings and pay his tax quarterly. It is interesting to find that from data covering 180 truckers in the nine counties studied (See Figure 1) and covering the entire period 1925-1930 the average number of quarters in business has been 5.8 or about a year and a half.

The average quarterly tax (3 per cent gross earnings tax) paid by these truckers was $7.11. This is the average for the entire 180 truckers and for the entire 5-year period. When this tax is capitalized at 3 per cent it gives an average quarterly gross income for all truckers of $237.16 or a monthly gross income of $79.05.

Table 21 gives much the same information as the above, by counties. Thus there were three truckers in Zieback county who paid a total of $66.96 tax and who were in business a total of 27 quarters. This makes the average tax per quarter $2.48. The total tax of $66.96 capitalized at 3 per cent gives a total earnings figure of $2,232.00. The average quarterly tax of $2.48 when capitalized in the same manner gives earnings of $82.67 per quarter or $27.55 per month.

It is quite evident from a study of Table 21 that Zieback county ranks far below the other counties during the period studied. In Harding county with five truckers in business a total of 49 quarters, we find that the average quarterly earnings were $242.67, or average monthly earnings of $80.89. The best showing appears for Butte county where the average gross earnings per quarter amounted to $367.67 or $122.55 per month. Mellette county was a close second with $364.00 per quarter. Perkins was third, Tripp fourth, Harding fifth, Haakon sixth, Jones seventh, Jackson eighth and Zieback ninth.

It becomes readily apparent from the above averages that either the "average trucker" has a very low income from his trucking business or

TABLE 21.—Average Earnings and Taxes Paid by Class B Permit Haulers in Nine Western South Dakota Counties

County	Number of Truckers	Number of Quarters	Total Tax	Tax Per Quarter	Average Number of Quarters in Business	Total Earnings*	Average Quarterly Earnings*	Average Monthly Earnings*
Ziebach	3	27	$ 66.96	$ 2.48	9.0	$ 2,232.00	$ 82.67	$ 27.55
Harding	5	49	365.66	7.28	9.8	11,888.67	242.67	80.89
Perkins	25	174	1,392.52	8.00	7.0	46,417.33	266.67	88.89
Butte	15	67	739.27	11.03	4.5	24,642.33	367.67	122.56
Tripp	62	260	1,957.37	7.53	4.2	65,245.67	251.00	83.33
Mellete	11	65	709.64	10.92	5.9	23,654.67	364.00	121.33
Jackson	14	104	478.81	4.60	7.4	15,960.33	153.33	51.11
Haakon	29	223	1,379.05	6.18	7.7	45,968.33	206.00	68.70
Jones	16	77	361.80	4.70	4.8	12,060.00	156.67	52.22
All counties	180	1,046	7,442.08	7.11	5.8	248,069.34	237.16	79.05

* Earnings computed by capitalizing the 3 per cent gross earnings tax.

that earnings are not being declared under the 3 per cent gross earnings feature of the Act. While it is possible that both statements are correct, it is also true that one must expect the average income to be low because of the trucking business being considered as a side-line or supplementary enterprise. For any one who already has a truck or needs one for his regular business and who has some time during the year to devote to the trucking business, the earnings do not need to be much above the cost of gas, oil, depreciation and the cost of going into the business to attract him into this field.

The earnings of some of the truckers are much higher than the average as previously indicated. The highest seems to have been made by a Tripp county trucker who has paid an average quarterly tax of $31.79 for all of the time that he has been in business. When capitalized at 3 per cent this gives him a gross income of about $353 per month throughout the year for his entire period in the trucking business.

It will be noted from Table 21 that Tripp county with 62 truckers had by far the largest number in the business during this period, while Haakon county was second with a total of 29 in the business. Harding county, however, led in the average length of time in the business with 9.8 quarters or an average life of over two years.

The large number of truckers and the reasonably successful showing on average earnings in Tripp county are undoubtedly due to the relatively high traffic density in this area and to the fact that the market centers drew business from a wide territory. Throughout the period of this study the only railroad tapping the "Rosebud territory"[3] ended at Winner in Tripp county. Thus parts of Mellette and Todd counties as well as Tripp county were dependent on Tripp county market centers.

The same reasoning may explain why Butte and Mellette county truckers had the most satisfactory quarterly earnings on the average. Butte county is tapped by a railroad only on its southern border, leaving

3. The "Rosebud" is that territory in south central South Dakota lying west of the Missouri river.

the remainder of the county almost entirely dependent on truck transportation. Residents of Mellette county were without railroad facilities throughout the period of this study although they have since received service by an extension of the Chicago Northwestern from Winner to Wood.

On the other hand, it may be possible to explain the relatively small average earnings in Jackson county by the fact that the traffic is naturally rather light and that the county is served by two railroads paralleling one another and at places hardly more than fifteen miles apart. Jones county is in very much the same position.

Table 22 gives information on average earnings by quarters of the year for each year and for each county included in the study. It will be observed that commercial trucking under the recent public utilities act began in Mellette and Haakon counties in 1925 when the act was passed. The next year it was started in Jackson county. In 1927 we have permit truckers operating (who are still in business) in Harding, Perkins and Butte counties. Records for Ziebach and Jones begin in 1928. In interpreting Table 22 it must be borne in mind that these are average earnings. They represent neither the maximum nor the minimum earnings.

From the point of view of average earnings, it appears that 1925 was the best year covered by this study with an average for the year of $1,928 per trucker. A larger number of truckers in 1926 earned an average gross revenue of $1,022 while in 1927 a much larger number earned an average of $1,072. From then on the average earnings decreased to $986 in 1928 and $777 in 1929.

However, from Table 23 we observe a steady and rapid annual increase in the computed total earnings of the commercial trucking business. Beginning in 1925 with $5,695 computed earnings from commercial hauling, we find that this sum increased to $10,178 in 1926. In 1927 this sum more than tripled, as the computed earnings rose to $37,672. By 1928 the computed earnings had reached $79,430 and by 1929 the one-hundred thousand dollar mark was exceeded with a total of $112,939. Thus it is seen that the business has been characterized by very rapid growth.

TABLE 22.—Average Computed Per Trucker by Quarters and by Years for Nine Counties 1925-1929

Quarter and Year	Ziebach	Harding	Perkins	Butte	Tripp	Mellette	Jackson	Haakon	Jones	Av. of All Counties	
										Dollars	Per Cent
Dec.	$ 38.33	$ 228.13	$ 188.92	$ 478.38	$ 205.41	$ 196.03	$ 95.12	$ 102.62	$ 663.33	$ 173.30	22.3
Sept.	33.33	355.60	469.65	461.04	336.14	595.48	154.38	163.41	187.20	313.69	40.3
June	------	350.07	116.56	244.60	194.64	274.33	80.33	101.14	102.93	153.81	19.8
March	23.33	69.33	129.42	205.33	174.26	175.50	132.11	113.71	97.00	137.02	17.6
Total 1929	95.00	1,003.13	904.55	1,389.35	910.45	1,241.34	461.94	480.88	1,050.46	777.82	100.0
Dec.	99.00	217.58	321.72	388.00	256.78	326.61	139.15	193.39	269.81	249.22	25.3
Sept.	20.00	367.92	463.27	267.33	376.41	448.50	286.13	337.08	238.85	346.53	35.1
June	51.67	305.92	121.36	274.47	233.44	356.89	63.28	169.08	211.75	184.53	18.7
March	91.67	229.83	234.97	202.58	299.04	348.44	79.67	167.31	181.67	205.91	20.9
Total 1928	232.33	1,121.25	1,141.32	1,132.38	1,165.67	1,488.44	568.23	866.86	902.08	986.19	100.0
Dec.	416.67	271.08	398.88	273.25	211.22	274.89	231.06	312.78	140.44	297.46	27.7
Sept.	------	163.75	403.38	508.75	365.42	555.00	501.20	541.90	------	435.24	40.6
June	------	74.67	119.87	333.84	37.00	368.33	50.42	161.67	------	135.00	12.6
March	------	164.67	217.58	402.50	46.17	511.67	219.17	130.27	------	204.83	19.1
Total 1927	416.67	674.17	1,139.71	1,518.34	659.81	1,709.89	1,001.85	1,146.62	140.44	1,072.53	100.0
Dec.	------	------	119.25	------	0.	537.33	115.17	392.27	------	261.41	25.6
Sept.	------	------	------	------	------	545.67	130.83	299.53	------	303.17	29.6
June	------	------	------	------	------	545.33	143.33	282.52	------	303.17	29.6
March	------	------	------	------	------	316.67	161.00	217.83	------	224.83	22.0
Total 1926	------	------	119.25	------	------	1,945.00	550.33	1,192.15	------	1,022.74	100.0
Dec.	------	------	------	------	------	369.00	51.67	513.44	------	392.20	------
Sept.	------	------	------	------	------	410.33	------	787.67	------	661.89	------
June	------	------	------	------	------	566.66	------	1,183.00	------	874.50	------
Total 1925	------	------	------	------	------	1,345.33	51.67	2,484.11	------	1,928.59	------

TABLE 23.—Total Computed Earnings of All Truckers Per Quarter and Year, by Counties

Quarter and Year	Ziebach	Harding	Perkins	Butte	Tripp	Mellette	Jackson	Haakon	Jones	Total All Counties	Annual Totals
Dec.	$ 115.00	$1,140.67	$ 4,723.00	$ 7,175.67	$12,324.33	$ 2,156.33	$1,331.67	$ 2,976.00	$1,061.33	$30,847.67	$
Sept.	100.00	1,778.00	9,862.67	4,149.33	18,823.67	6,550.33	2,007.00	4,739.33	2,808.00	50,818.33	
June	------	1,750.33	2,098.00	1,223.00	5,644.33	1,920.33	723.00	2,326.33	926.33	16,611.65	
March	70.00	277.33	2,329.67	1,026.67	5,227.67	1,053.00	1,189.00	2,615.33	873.00	14,661.67	
Total 1929	285.00	4,946.33	19,013.33	13,574.67	42,020.00	11,680.00	5,250.67	12,657.00	5,668.67		112,966.32
Dec.	297.00	870.33	5,791.00	1,940.00	6,933.00	1,959.67	1,252.33	4,448.00	2,428.33	25,919.66	
Sept.	60.00	1,471.67	7,412.33	1,336.67	7,904.67	1,794.00	2,289.00	5,730.33	2,149.67	30,148.34	
June	155.00	1,223.67	1,577.67	1,372.33	2,801.33	1,070.67	379.67	2,198.00	847.00	11,625.34	
March	185.00	919.33	3,054.67	810.33	2,691.33	1,045.33	478.00	2,007.67	545.00	11,736.66	
Total 1928	697.00	4,485.00	17,835.67	5,459.33	20,330.33	5,869.67	4,399.00	14,384.00	5,970.00		79,430.00
Dec.	1,250.00	1,084.33	4,387.67	1,093.00	1,267.33	824.67	1,386.33	3,753.33	421.33	15,467.99	
Sept.	------	655.00	3,237.00	2,035.00	1,461.67	1,110.00	2,506.00	2,793.33	------	14,798.00	
June	------	224.00	599.33	667.67	74.00	368.33	201.67	970.00	------	3,105.00	
March	------	494.00	870.33	805.00	92.33	511.67	876.67	651.33	------	4,301.33	
Total 1927	1,250.00	2,457.33	9,094.33	4,600.67	2,895.33	2,814.67	4,970.67	9,168.00	421.33		37,672.32
Dec.	------	------	477.00	1,007.67	------	537.33	460.67	1,961.33	------	4,444.00	
Sept.	------	------	------	------	------	545.67	523.33	1,497.67	------	2,566.67	
June	------	------	------	------	------	545.33	143.33	1,130.33	------	1,818.99	
March	------	------	------	------	------	316.67	161.00	871.33	------	1,349.00	
Total 1926	------	------	477.00	1,007.67	------	1,945.00	1,288.33	5,460.67	------		10,178.66
Dec.	------	------	------	------	------	369.00	51.67	1,540.33	------	1,961.00	
Sept.	------	------	------	------	------	410.33	------	1,575.33	------	1,985.66	
June	------	------	------	------	------	566.00	------	1,183.00	------	1,749.00	
Total 1925	------	------	------	------	------	1,345.33	51.67	4,298.67	------		

Table 24 shows that for all nine counties taken together, the months of July, August and September are the best months from the point of view of earnings. Thus in the year 1929, 40 per cent of the average gross earnings came during these three months. In 1928 these months accounted for 35 per cent of the total gross earnings as against 25 per cent for the fourth quarter which was second. Again in 1927 we find about 41 per cent earned during the third quarter or the months of July, August and September. The seasonal variation for the year 1926 does not show the same tendency but it contains records for only three counties as may be seen by referring to Table 22.

TABLE 24.—Average Earnings of Truckers by Quarters in Nine Counties Expressed as a Percentage of the Annual Total Earnings

Quarter and Year	Per Cent of Annual Earnings
December	22.3
September	40.3
June	19.8
March	17.6
Total 1929	100.0
December	25.3
September	35.1
June	18.7
March	20.9
Total 1928	100.0
December	27.7
September	40.6
June	12.6
March	19.1
Total 1927	100.0
December	25.6
September	22.8
June	29.6
March	22.0
Total 1926	100.0

The above figures do not hold true for all counties, however. Table 25 shows the ranking of average earnings by quarters and by counties for each year. The quarter with the highest average earning in the year in each county is numbered 1, the second is numbered 2, etc. Thus in Ziebach county for 1929 the December quarter is highest, the September quarter is second, the June quarter is fourth and the March quarter is third.

The third quarter, consisting of July, August and September, shows the highest earnings in six of the nine counties in 1929, 1928 and 1927. However, Ziebach, Butte and Jones counties appear to obtain the greater part of their trucking business in the fourth quarter instead of the third.

Except for the best quarter of the year, one cannot help but notice the lack of uniformity, not only among the counties for a given year, but also in the same county from year to year. In many cases these changes are of little importance, as the earnings appear to be very nearly equal as reference to Table 22 will show.

As previously indicated, Table 23 provides a good picture of the rapid growth of the trucking industry in this western South Dakota area. From this table one may readily follow the growth of the commercial trucking

TABLE 25.—Rank of Earnings by Quarters of the Year With Highest Ranked No. 1, Second Highest No. 2, etc. for Each County, Years 1925-1929

Quarter Ending	Ziebach	Harding	Perkins	Butte	Tripp	Mellette	Jackson	Haakon	Jones	All Counties
					1929					
Dec.	1	3	2	1	2	3	3	3	1	2
Sept.	2	1	1	2	1	1	1	1	2	1
June	4	2	4	3	3	2	4	4	3	3
March	3	4	3	4	4	4	2	2	4	4
					1928					
Dec.	1	4	2	1	3	4	2	2	1	2
Sept.	4	1	1	3	1	1	1	1	2	1
June	3	2	4	2	4	2	4	3	3	4
March	2	3	3	4	2	3	3	4	4	3
					1927					
Dec.	-	1	2	4	2	4	2	2	-	2
Sept.	-	3	1	1	1	1	1	1	-	1
June	-	4	4	3	4	3	4	3	-	4
March	-	2	3	2	3	2	3	4	-	3
					1926					
Dec.	-	-	-	-	-	3	4	1	-	-
Sept.	-	-	-	-	-	1	3	2	-	-
June	-	-	-	-	-	2	2	3	-	-
March	-	-	-	-	-	4	1	4	-	-
					1925					
Dec.	-	-	-	-	-	3	-	-	-	-
Sept.	-	-	-	-	-	3	-	-	-	-
June	-	-	-	-	-	1	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-

business in any of the counties involved in the study. It would appear that it has made no progress in Ziebach county, for example, while in Jackson county it has grown from a $1,288 business to a $5,200 business in 4 years. In Harding, Perkins and Butte counties it has more than doubled in 3 years. The most rapid growth has been in Tripp county, where the declared gross income of truckers in 1927 was $2,895 and in 1929 it was $42,020.

Table 26 is included in order to show the relative importance of the trucking industry by years in the various counties studied. From this table we see that Ziebach county ranks ninth or last in both years for which data could be gathered for the full year. Harding county ranked eighth in 1929 and seventh in 1928 and 1927. Perkins county ranked second in 1929, 1928 and 1927. The rest of the table may be readily followed.

One of the questions which is likely to arise is whether or not there is any definite relationship between the length of time in which a man has been engaged in the trucking business and the earnings that he is obtaining from it. To put the question in another way, we might ask: "Do the men who have been in business longer make a larger gross income than those who have just started?"

Table 27 and Figure 4 may give a partial answer to this question. In the first column of Table 27 we have the number of quarters in business. That is, the state law requires that these truckers report on their gross earnings, four times a year, March, June, September and December. A report for one quarter, then means a trucker who has obtained his permit

TABLE 26.—Ranking of Nine Counties in Importance of Trucking Business by Years Based on the Computed Gross Earnings of Truckers in Each County

County	Rank in 1929	Rank in 1928	Rank in 1927	Rank in 1926	Rank in 1925
Ziebach	9	9	-	-	-
Harding	8	7	7	-	-
Perkins	2	2	2	-	-
Butte	3	6	4	-	-
Tripp	1	1	5	-	-
Mellette	5	5	6	2	2
Jackson	7	8	3	3	-
Haakon	4	3	1	1	1
Jones	6	4	8	-	-

Note: No. 1 denotes highest gross earnings, No. 2 next, etc.

so recently that he had reported his earnings only in December, 1929. Two quarters would mean December and September, or that the man had been in business for six months, etc. The second column gives the number of truckers in the nine counties studied that had been in business the specified number of quarters. Thus there were 16 truckers in business for one quarter, 54 in business for two quarters, etc.

The next column gives the quarterly average tax paid per trucker. Thus, $6.30 is the average tax paid in December by the 16 truckers who had been in business one quarter, etc. The same explanation holds true for the next three columns. The last column is the average tax paid for the year 1929 by each group of truckers based on their life in business. While this table shows only the gross earnings tax paid, the gross earnings themselves may be readily obtained by capitalizing the tax at a 3 per cent rate.

The reasoning behind this table is that if the truckers who have been in the business longer are more successful than those who have been in business a shorter period of time, then the average gross earnings tax for

TABLE 27.—Average Gross Earnings Tax Per Trucker Paid in 1929 by Truckers Who Had Been in Business From 1-19 Three Month Periods

Number Quarters	Number Truckers	December Quarter Av.	September Quarter Av.	June Quarter Av.	March Quarter Av.	Yearly Average
1	16	6.30	[illegible]	[illegible]	[illegible]	[illegible]
2	54	3.04	4.90	[illegible]	[illegible]	[illegible]
3	[illegible]	8.48	[illegible]	[illegible]	[illegible]	[illegible]
4	2	5.51	.13	[illegible]	[illegible]	[illegible]
5	16	3.17	13.54	5.37	3.68	25.77
6	25	6.17	10.97	4.01	4.30	25.45
7	5	9.04	19.03	8.48	6.60	43.15
8	7	7.45	10.78	.93	1.42	20.58
9	17	3.51	9.29	1.36	1.77	15.93
10	19	9.20	10.93	3.49	4.10	27.72
11	3	19.77	19.42	16.03	16.10	71.31
12	5	6.66	18.42	8.98	.81	34.87
13	6	13.09	9.03	7.41	5.30	34.84
14	4	1.32	4.25	1.77	4.33	11.68
15	0					
16	1	4.42	5.52	8.87	4.06	22.87
17	2	7.25	8.40	6.53	3.89	26.07
18	1	17.44	15.98	7.00	23.82	64.24
19	2	14.97	18.81	9.01	10.08	52.87

any year such as 1929 should be higher for the former than for the latter group.

A careful study of the average tax paid by truckers who have been in business shorter and longer periods does not disclose any very close correlation between earnings and length of time in business. For example, we find that in the December quarter of 1929 the truckers who had been in business only three quarters have paid an average tax of $8.48 while those who had been in business for 12 quarters paid only $6.66. Many similar cases are immediatly discernible.

However, there is probably a tendency in the direction of higher average earnings for those longer in the service. This may be more clearly discernible in Figure 4. This figure shows graphically the data brought out in the last column of Table 27. It shows the relationship between the gross earnings tax paid, and hence the earnings, of truckers who have been in business from one year to five years taking them by quarters of the year.

If we take as established businesses those who have been in business two years (8 quarters) or more we can see rather clearly that they obtained a higher average gross income in 1929 than those from four to eight quarters. However, as previously indicated, the relationship is not clear cut.

Undoubtedly the smallness of the sample, containing as it does only 180 truckers, may somewhat obscure any tendency that might otherwise be more apparent. It may also be true that truckers who have been in the business longer have learned how to evade a portion of their tax. It is perhaps also true that since trucking for others is taken on as a side-line

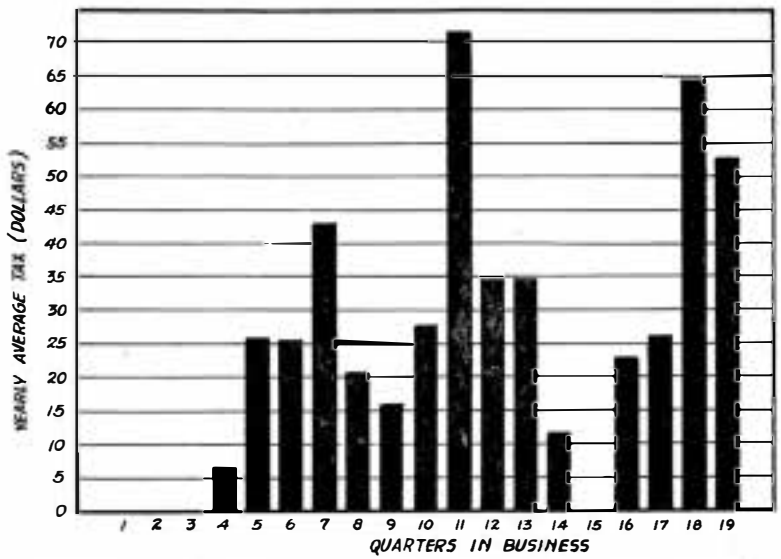

Fig. 4.—Average tax paid in 1929 by truckers who had been in business four quarters or more. Grouping shown according to the number of quarters in business.

enterprise by many truckers, the relationship of earnings to life in the business is not as clear cut as it might otherwise be and likewise makes the small sample doubly dangerous to draw any definite conclusions from.

Table 28 is included to show how commercial truckers have fared throughout their business lives. It differs from Table 27 in that the "total tax" and the "average tax" columns are for all gross earnings taxes paid by the truckers involved. Thus the seven truckers who had been in business eight quarters had paid a total tax during these eight quarters of $339.03, which was an average of $6.05. This amount capitalized at 3 per cent gives an average quarterly gross earning of $201.67. Those who have been in business for 19 quarters have averaged $562.00. The one trucker who had been in business for 18 quarters made an average of $972.78. Naturally those who have been in business a shorter time have been in competition with those who have been in business a longer time, and vice versa.

One cannot properly compare one group with another in this table. The reason for this can best be illustrated. If we were to compare the one trucker who had been in business 18 quarters with those who had been in business only four quarters, we would find that the average for the man who had been in business 18 quarters would include 14 quarters which was not included in the average of the four quarter group. They would not have been in competition during this period.

Thus, any comparison which is made must take the whole period of business life of the trucker into account instead of just the period that the group with the shorter business life may have been in business.

TABLE 28.—Average Earnings of Truckers According to Length of Service in the Trucking Business

No. of Quarters in Business	Number of Truckers	Number of Quarters	Total Tax	Av. Tax Per Quarter	Av. Earnings Per Quarter
0	2	----	$-,---.--	$---.--	$---.--
1	16	16	100.83	6.30	210.00
2	54	108	429.27	3.97	132.33
3	2	6	64.07	10.68	356.00
4	2	8	13.31	1.66	55.33
5	16	80	526.66	6.58	219.33
6	25	150	1,031.72	6.88	229.33
7	5	35	371.56	10.62	354.00
8	7	56	339.03	6.05	201.67
9	17	153	757.64	4.95	165.00
10	11	110	1,004.00	9.13	304.33
11	2	22	228.07	10.37	345.67
12	4	48	281.01	5.85	195.00
13	6	78	668.86	8.58	286.00
14	5	70	394.04	5.63	187.67
15	---	---	---------	---.--	------
16	1	16	107.20	6.70	223.33
17	2	34	168.48	4.96	165.33
18	1	18	315.26	17.51	972.78
19	2	38	640.74	16.86	562.00

When one remembers that the average earnings shown are gross earnings out of which all expenses must be taken, it would appear that this busines has not been particularly lucrative. However, in arriving at this conclusion one must allow for the possibility of understatement of

earnings in the payment of the gross earnings tax. Allowance must also be made for the condition previously mentioned, namely, that in many cases it is only a part time business which adds any profits made, however small, to the trucker's total annual income. This is, however, the best information obtainable on the average earnings of truckers in their chosen business and while the actual figures may be somewhat low it is probably true that the comparisons made among groups are reasonably reliable.

SUMMARY AND CONCLUSIONS

Growth of Trucking

1. There has been a rapid growth in number of motor trucks in western South Dakota. The increase in the nine counties included in this study amounted to 291 per cent from 1923 to 1931. This increase compared with 138 per cent for the state as a whole shows a more rapid development in the western section for the above period.

2. The number of farms with trucks has increased rapidly during these years. In 1925 there was one truck to about every ten farms in the area studied. In 1930 the number had increased to one truck for every five farms for the entire area and one for every two farms in Butte county, which shows the largest percentage.

3. There has been a shift in the direction of larger trucks during the period from 1925 to 1931. Trucks hauling less than two tons have declined somewhat, relative to the entire number, while trucks carrying two tons or over have increased. Definite conclusions are difficult to draw, however, because of the short period of time elapsing since any change became evident.

Trucking in the Philip Area

1. The average haul for grain into Philip is over 26 miles. The haul of greatest frequency is from 31 to 35 miles. Over 16 per cent of all loads of grain come from more than 35 miles. More than one per cent comes from 60 miles and over. These facts clearly indicate the importance of the local transportation problem and of local transportation costs. These costs under the conditions found in western South Dakota constitute an important item in the farmer's costs of growing and marketing his grain.

2. The most frequent size of load is one weighing from 3600 to 4100 pounds. Nineteen per cent of all loads studied were in this weight group.

3. As one would expect, the farmer himself hauls most of the grain, or about 60 per cent. Commercial hauling constitutes about 22 per cent of all grain hauled, while about 18 per cent is hauled by agencies other than those mentioned above.

4. There is no commercial hauling for distances over 45 miles. Since the rate would be over 24 cents per cwt. for this distance it is readily seen why this is true. On the other hand commercial hauling is the most popular of the three types for distances up to 20 miles. Over 28 per cent of all grain hauled is hauled by commercial truckers, compared with 9 per cent for "self hauled" and 13 per cent for hauling by others over this same distance.

5. The amount of hauling by agencies other than by the farmer himself or commercial haulers does not show any definite relationship to distance hauled. It increases steadily up to the distance zone 31 to 36 miles, where it reaches a maximum of 9 per cent of the total grain hauled. It becomes a negligible quantity at distances over 40 miles though it continues to persist up to 60 miles.

Commercial Hauling

1. The business of commercial hauling is of recent development in western South Dakota. Of the nine counties included in this study only three counties reported any gross earnings tax from trucking as late as 1926.

2. The rapid growth of the business may be observed from the following data. In 1925 there were 14 "permit" truckers in the nine counties. In 1926 there were 50 new permits issued, in 1927 there were 93 issued, in 1928 there were 122 new ones issued, while in the two years 1929 and 1930, 165 new permits were issued.

3. The rapid mortality rate in this new business is also in evidence. Of a total of 382 who started the business during the period of this study, 244 dropped out and only 138 continued. The average business life is surprisingly short.

4. The average quarterly tax paid by the entire 180 truckers for the five-year period was $7.11. When this tax is capitalized at 3 per cent it gives an average quarterly gross income of $237.16 per trucker. This makes a monthly gross income of $79.05. This income is figured before expenses are taken out. When one remembers this fact, and also the fact that many truckers receive less than this average income, it is apparent that the earnings of truckers have been low.

5. Trucking on a commercial basis is commonly engaged in as a side-line. One may either reason that earnings are low because of this fact, or in some cases no doubt, it is a side-line because opportunities for profit in a community are small, thus making it difficult to engage in the business as an exclusive method of livelihood and profit. A man who owns a truck and has leisure time may profitably use the business to supplement his regular occupation, and others who may not be able to afford a truck for their regular business may find it profitable to buy one if they can fill out its use by engaging in transportation for hire.

6. July, August and September are the best business months for truckers in six of the nine counties. In the other three, October, November and December are the best.

7. There appears to be no clear cut relationship between length of time in the business and earnings secured. Such relationship as is indicated, however, tends to bear out the belief that the older established businesses have the larger earnings.

APPENDIX

The Effect of the Motor Carrier Act of 1933 on the Problem of This Study

The Motor Carrier Act passed by the South Dakota legislature in the 1933 session made some rather fundamental changes in the problem of motor transportation from the point of view of both the farmer and the commercial trucker. It will be the purpose of this section to indicate such changes and some of their probable effects.

Under the new law the term "motor carrier" is re-defined as follows: "The term 'motor carrier,' when used in this Act, means any person owning, controlling, operating or managing any motor vehicle, trailer, or semi-trailer for the transportation of person and / or property over the public highways in this state; providing, that the term "motor carrier" as used in this Act shall not include corporations or persons insofar as they own, control, operate, or manage motor vehicles generally known as passenger cars of the type, style, or model commonly called roadster, touring car, coupe, brougham, sedan and vehicles of the classes or types so named of not more than seven passenger seating capacity when such vehicles are used for the transportation of persons only, for pleasure, and / or for the purpose of the private business in which said operator or his employer is engaged; school busses which are used in conveying school children to and from consolidated or other schools; motor vehicles owned and operated by the government of the United States, of the state of South Dakota, and the counties, school districts, cities, and towns thereof, so long as the same are used in the transaction of official business by their respective officials, boards or departments, and are used neither for the conveyance or transportation of person and / or property for hire. pleasure or private business; hotel and passenger busses, taxi cabs, motor hearses, delivery or other trucks, and police patrol wagons operated exclusively within the corporate limits of a municipality; motor vehicles exclusively used by a person who delivers in his own vehicle goods and merchandise in pursuance of bona fide sales at retail to the consumers thereof, residing outside the limits of cities and towns; motor vehicles exclusively used in the transportation of products originating in and / or produced from or necessary to, or for farming, mining and / or logging operations when transporting such products actually produced or owned by the owner of such motor vehicle or vehicles or occasionally used in hauling such products in the ordinary exchange of work."[4]

The important thing to note in this definition is that all motor vehicles are " motor carriers" under the law except those specifically excluded in the above definition. As such they are subject to the "Motor Carrier Act."

From the viewpoint of this study the important change is that a motor vehicle "occasionally used in hauling such products (farm products or mining or logging products) in the ordinary exchange of work" are ex-

4. Citations of the new law are taken from H. B. 304, Motor Carriers, Session of 1933.

cluded from a classification as motor carriers. This apparently means that the farmer who uses his truck occasionally in exchanging work with his neighbors is no longer legally required to pay fees as a motor carrier. This was a provision in the old law that aroused considerable antagonism among farmer truck owners.

Under Section 1 of the new law dealing with "Declaration of Policy" we find: "The business of operating as a motor carrier as hereinafter defined upon the highways of this state is declared to be a business affected with the public interest. The rapid increase in motor carrier traffic over the highways of this state tends to subject said highways to unusual wear and impairs the said highways disproportionately to the travel thereon by the general public necessitating compensation to the state for the maintenance, upkeep and policing of the said highways to the end that said highways may be maintained in the best possible condition for the convenience and use of the general public."

In effect this places "motor carriers" in the class of public utilities and recognizes that the government is entitled to special "compensation" for unusual wear on the highways.

It is with this "compensation" that this study is primarily interested. Under the old law, in addition to the regular fees the motor carrier was required to pay a 3 per cent gross earnings tax as discussed previously in this study. This requirement is now repealed and another system of "compensation" is substituted for it.

All motor vehicles operated as "motor carriers" are divided into six classes:

"(A) Class (1) shall include all such vehicles, trailers or semi-trailers, of a gross weight of four (4) tons or less.

"(B) Class (2) shall include all such vehicles, trailers, or semi-trailers, of a gross weight of over three (3) tons and not more than five (5) tons.

"(C) Class (3) shall include all such vehicles, trailers, or semi-trailers of a gross weight of over five (5) tons and not more than seven (7) tons.

"(D) Class (4) shall include all such vehicles, trailers, or semi-trailers, of a gross weight of over seven (7) tons and not more than ten (10) tons.

"(E) Class (5) shall include all such vehicles, trailers, or semi-trailers, carrying passengers for hire, such as busses and livery vehicles of seven (7) passengers or more.

"(F) Class (6) of such motor vehicle, trailer, or semi-trailer, shall include any and all of the vehicles, trailers and/or semi-trailers, mentioned in sub-sections A, B, C and D, defining Classes 1 to 4, inclusive, when the same are used exclusively in the transportation of farm products from the farm to market. Vehicles in this class shall be subdivided into separate classifications on the same basis of classification as subdivisions A, B, C and D of this section, and shall be respectively called Class 6A, Class 6B, Class 6C, Class 6D."

Every person operating a "motor carrier" chooses the maximum gross weight to be carried by his truck or, in other words, the class shown above which he intends to operate in. This may be made without regard to the manufacturer's rated carrying capacity. Having chosen his classification he secures a "compensation certificate."

This compensation for the unusual use of the highways is determined as follows: In addition to the regular license fees or taxes the person operating a motor carrier pays in quarterly installments an annual sum based on the classification which he has chosen as previously discussed. These sums are as follows:

"Class 1 ---------- $ 30.00 per year
Class 2 ---------- 80.00 per year
Class 3 ---------- 140.00 per year
Class 4 ---------- 200.00 per year
Class 5 ---------- 1.00 per month
for each passenger seat rating thereof, payable in advance, or before the first day of each month.
Class 6-A ---------- $ 30.00 per year
Class 6-B ---------- 50.00 per year
Class 6-C ---------- 70.00 per year
Class 6-D ---------- 100.00 per year
for vehicles fitted with solid rubber tires, the above rate and twenty-five (25) per cent additional."

It will be noted that another concession is made to the farmer in that any motor carrier hauling farm products exclusively falls in Class 6 where the "compensation" averages somewhat lower than for similar truckers handling a general business. This concession may be more apparent than real, however, since there is no difference in compensations paid in Class 1, which includes all trucks and loads up to four tons and since the majority of farm loads probably do not exceed this figure. Thus the farmer may gain less from this provision than might otherwise be expected. It is well to notice also that any gain which the farmer receives will have to come indirectly through lower rates fixed by the trucker. Such gains will, in many cases where sharp competition is lacking not be reflected to the farmer.

It is still necessary under the new law to obtain a "permit" from the state to engage in the commercial motor transportation business and to furnish such bonds as are required by law.

The probable effects of this new legislation naturally cannot be accurately foretold. A few tendencies, however, seem to be sufficiently clear to warrant suggesting. In the first place it will probably have a tendency to lessen evasion of the law. This is especially true in the case of farm hauling by the group classified as "hauled by others" in this study. That such hauling was in many cases "outside the law" is quite evident. Likewise there was never a really effective machinery developed to check on the true gross earnings of truckers, and where competition was keen there was a great incentive to avoid declaring the true gross earnings for tax purposes.

With the substitution of a "flat rate" of compensation for the old rate based on earnings we can naturally expect some effect on the number of truckers willing to engage in the business of commercial hauling. No one will now engage in, or continue for any length of time in the business unless they can earn enough to pay their fixed compensation fee as well as their other costs. It is reasonable to expect that this will discourage many part-time truckers from engaging in the business of commercial trucking. On the basis of data brought out in this study such "compensation" fees will be ruinous to many truckers. Considering the short life of commercial truckers in the past and the cut-throat competition existing in some areas, such action may prove desirable from the point of view of public policy.

Proponents of the new law maintain that it will greatly increase the revenue going to the state. It is reasonable to suppose that such reveune will be increased above the very unsatisfactory revenue coming from the old gross revenue measure but it is easy to over-estimate such increase in revenue, for reasons already pointed out, namely: that we must first observe its effect on the trucking business before estimating the probable revenue.