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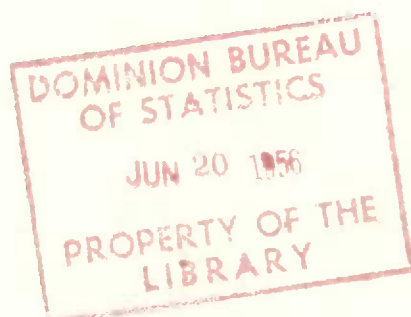


CANADA

MOTOR TRANSPORT TRAFFIC STATISTICS

PROVINCE OF MANITOBA

Year ended June 30, 1955



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INTRODUCTION

Although the Dominion Bureau of Statistics has been collecting and publishing financial and operational statistics of Motor Carriers since 1941, this is the first detailed report on Motor Transport Traffic Statistics published in Canada. The statistics are presently confined to the Province of Manitoba but subsequent reports will have a progressively wider coverage until the whole of Canada is included.

As far as is known, Canada is the only country which utilizes the technique of continuous Sample Surveys to provide current statistics on Motor Transport Traffic. Many countries, among them Italy, Switzerland, Britain and the United States conduct surveys periodically, but none has so far adopted this method on a continuing basis.

The statistical concepts of sampling are relatively simple, even as applied to Motor Truck

Transportation. However, the practical organization of surveys can present difficulties which may be insurmountable in most countries, or which at least, would be extremely expensive to overcome. Thus the desire and need for Motor Transport Traffic Statistics must be balanced against the expense of providing them.

In Canada the practical difficulties of such a statistical program are considerable. Motor transportation is a provincial responsibility and this necessitates dealing with ten separate motor vehicle licence registration authorities. Furthermore, methods of licensing vary considerably from one province to another, complicating the method of sample selection. However, this and other difficulties have gradually been overcome so that it is now only a matter of time until Motor Transport Traffic Statistics will be available for all provinces.

The Need for Road Transport Statistics

The demand for these data arises primarily from the spectacular growth of trucking in the years since the second world war. By its very nature, motor transport is an extremely difficult branch of economic activity for which to develop adequate statistics. The industry is composed of a few large firms and many small ones. Much of the traffic moves over relatively short distances, and the average shipment is small. Also, more than half the truck traffic on city streets and rural roads is performed by private truckers carrying their own goods. Bookkeeping methods and detail recorded by many truck operators fail to provide all the data that is necessary to understand the operations of this industry. All of these factors tend to complicate the task of calculating such traffic statistics as tons carried and ton miles performed.

Nevertheless the growth of this industry (using the term "industry" to denote all forms of trucking whether public or private) and its significance in relation to the economy as a whole have emphasized the need to undertake what, in the beginning, looked like an almost impossible task. Various levels of government as well as many private interests and organizations are interested in the growth of trucking and are anxious to have statistics relating to its size and importance. These interests may be briefly summarized as follows.

Federal Government: Transportation is a relatively more important economic element in Canada than in many other countries. Canada's national

problems of political unity, social integration and economic development have all been bound up with transportation to a degree unmatched in any western country. That it has been, and continues to be a subject of great national importance is apparent from the fact that no less than six Royal Commissions have reported on the subject since Confederation.

1. The Drayton Acworth Commission—reported April 25, 1917.
2. The Duncan Commission—reported September 23, 1926.
3. The Duff Commission—reported September 13, 1932.
4. The Rowell Sirois Commission—reported May 3, 1940. (transportation among other matters).
5. The Turgeon Commission—reported February 9, 1951.
6. The Turgeon Commission—on Agreed Charges—reported February 21, 1955.

The 1951 Royal Commission noted the growth of trucking and its effect on the Railway industry. It recommended Federal control of interprovincial and international trucking under the Board of Transport Commissioners. It was apparent that Federal regulation of any part of the trucking industry would not be possible without adequate traffic and oper-

ating statistics. During the hearings it became evident that without adequate motor transport statistics it was very difficult to assess the real impact of truck competition on rail traffic, or to even obtain an estimate of total truck traffic that both railway and truck interests could agree on. Because of the complex nature of rail and road transport competition which is an element of considerable importance to the economic future of both modes of transportation, it has become a matter of necessity to measure, with reasonable accuracy, the amount of transportation being performed on highways by trucks and buses.

Provincial Governments: Regulation and taxation of truck and bus operators and the provision of roads and streets for them to operate on are provincial responsibilities in Canada. The economic development of many areas and industries is directly dependent on the availability of highway transportation and is reflected in the growth of that industry. Highways built where they are most needed will produce the maximum benefits. Availability of Motor Transport Traffic Statistics is a prime necessity in planning the most efficient and economical application of road and street expenditures.

Municipal Governments: Municipalities have many of the same interests and responsibilities in the matter of road and street traffic. Cities, towns and villages depend largely on truck transportation to link their industries and to carry their commerce. At the same time this increasing dependence on

motor transportation has created enormous traffic problems which must be solved if municipalities are to continue to thrive and grow.

Trucking Associations: One of the first organizations to become concerned about the lack of Motor Transport Traffic Statistics was the Canadian Trucking Associations. The rapid growth of trucking in Canada made it inevitable that pressure would build up on the part of the national association of truckers for statistics concerning this increasingly significant segment of the whole transportation industry. The Canadian Trucking Associations was anxious to understand and to interpret for itself and for the public at large, the fundamental changes which have taken place in the transportation industry; changes which are as yet imperfectly understood because of our inability to measure them in accurate quantitative terms.

Other Users: An accurate statistical picture of motor transport traffic would assist automobile and truck manufacturers, tire manufacturers and fuel companies to assess the market potential available to them in the motor transport field. Continuous statistics showing the growth trends of the various parts of the motor transport industry would be valuable to other industrial concerns which depend for part or all of their business on truck and bus operations, and as well to the companies within the industry as a means of comparing their results with those of the industry as a whole or with those performing the same type of operation.

HISTORY OF MOTOR TRANSPORT STATISTICS IN CANADA

Motor Carrier Statistics: In 1941 the Bureau commenced the collection of certain Motor Carrier Statistics, which fall short of current requirements in four ways.

1. The coverage is limited in that these statistics apply only to common carriers of freight, that is, to companies engaging in common carrier hauling by truck on a for hire basis. This leaves a larger part of the interurban traffic unaccounted for statistically: the part being performed by private operators hauling their own goods, contract carriers, and by farmers.
2. The range of statistics obtained on a "Carrier" basis is restricted to certain financial and operating data on a company basis. Comprehensive traffic statistics including the directional movement of commodities by trucks across provincial or international boundaries are lacking as is also data on highway use and the breakdown of operations between rural and urban areas.
3. The Bureau has experienced considerable difficulty in obtaining motor carrier statistics owing to the reluctance or inability of many firms to report the information requested. Figures which have been published,

therefore, represent only an indeterminate part of the industry. An attempt is presently being made to obtain "Carrier" figures on a sampling basis so that more complete industry figures can be provided.

4. Owing to the length of time necessary to obtain sufficient carrier returns for the report, there is generally a considerable time lag in the publication of the statistics. One of the aims of the Bureau is to reduce this time lag substantially.

As a result of the need for traffic data and the complexity of the field of motor transport statistics, it was decided to obtain truck traffic statistics by means of a scientifically designed random sample. It was consequently decided to adopt a vehicle sample and collect figures on the basis of individual vehicles operating, rather than by carriers. This program lent itself to the use of sampling techniques as they had been applied in sample studies conducted in Switzerland and Britain. Furthermore, it became obvious that the sample approach would have to be tried if such detailed statistics as ton miles, and passenger miles were to be obtained. The conclusive argument in favour of the vehicle sample method was the desire to include statistics

of all forms of trucking as well as that performed by common or for hire carriers. These would be impossible to obtain under any other method.

Once a statistical sample survey was decided upon, steps were taken to secure the co-operation of the Provincial registration authorities, whose records constituted the only practical source of up-to-date vehicle registration data from which a sample could be chosen.

The Conduct of a Pilot Survey – Choice of Test Province: The first major step was taken in 1954 when Manitoba was chosen as the province in which to conduct a pilot survey. Manitoba was believed to be an ideal starting place for the following reasons:

The degree of co-operation provided by the Provincial licensing authorities made it possible to choose successive samples from Provincial registration records, thus assuring up-to-date mailing lists.

The system of registration was on functional lines which made it possible to choose the sample in a particularly efficient way from a statistical point of view.

The province is not so large as to involve undue risk in undertaking a major experiment, nor is it so small as to constitute an inadequate test.

General Description of the Sample: The four licence classes in the province, T, FT, PSV and CT, correspond to an urban, farm, for hire and private breakdown, considered desirable as a basis for the presentation of truck traffic statistics. It was decided to stratify each of these classes by gross vehicle weight since many statistics have a special relevance to the size of the vehicle, e.g. miles per gallon. The six weight groups selected were: 0-2½ tons; 2½-5 tons; 5-7½ tons; 7½-10 tons; 10-15 tons; and over 15 tons. An important consideration was that such a stratification would permit any given sample ratio to yield more than that proportion of vehicle capacity in the final sample. For example, the over-all sample ratio decided on was 20%. However, the proportions selected by weight groups varied from 5% in the lowest weight group, to 100% for the largest vehicles. This tended to improve reliability since the higher sample ratios were concentrated amongst the vehicle classes having the smallest number and the most diversified type of operations. By distributing the sample in this way, an over-all 20% ratio was made to represent approximately 45% of the capacity of all the vehicles registered.

At the same time, it was decided to split the yearly sample of 20% into six bi-monthly subsamples to be surveyed every two months, thus giving the effect to seasonal variations in truck operations. To make sure that each subsample represented current registrations in force, it was decided that each subsample of approximately 3 1/3% would be selected independently just prior to the subsample

survey, and that each vehicle would be coded as picked, so that it could be excluded from subsequent surveys. In that way, no particular vehicle was to be included in more than one survey per year, although a company with several vehicles would probably have trucks in every survey. The Appendix shows the over-all sample size to total truck population as well as the number of questionnaires returned complete, incomplete, non-response and the number of trucks not used.

It was decided that each survey would be conducted for the period of one week. The operator of each vehicle selected in the sample, was asked to complete a questionnaire on that vehicle's operations for the specified week. Sample results then had to be expanded to represent not only the work done by the whole vehicle population, but also the work performed in a two month period instead of just one week. In theory at least, any average week in the two months would have been satisfactory, but from the point of view of the administration of the survey it was essential to designate a particular week.

Statistical Considerations: The object of undertaking a sample survey was to cut down the amount of work involved in a complete census of the motor transport industry, an undertaking which would have been impracticable because of the enormous size and complexity of the job. However, once it had been established that the survey was to be undertaken on a sample basis, there was considerable variation possible in the actual size of the sample selected. The first consideration is the degree of accuracy that is desired in the results. In this case planning was on the basis of an acceptable error of 5%. Taking into account the homogeneity of the population, the numbers of vehicles in each weight category, the anticipated seasonal variations, the variety of work performed by the various trucks, and the anticipated rate of response, it was decided that for the pilot survey a 20% sample would be adequate. For farm trucks where the number of vehicles is relatively large, and where the range of vehicle size and type is relatively limited, the over-all sample ratio was reduced to 10%. That is, in every weight group the percentage of farm trucks selected was only one half that of the other licence categories. After several bi-monthly surveys had been completed, a further analysis was undertaken to determine whether the level of reliability was within acceptable limits considering the results achieved. As a result of this analysis, it was decided, to cut down the Manitoba sample to about 15% of the population, with no differential for farm trucks. It was found, for instance, that because farm vehicles are smaller on the average than other classes, the effective over-all sample ratio would be less in any case. In addition, the response rate for farm vehicles is less than for other groups so that the same sample ratio yields proportionately fewer usable returns.

Statistical Limitations: With any stratified sample, the most accurate results are those reported

for the whole sample, rather than for any part of it. Furthermore, the accepted accuracy limitations above apply to the total results for major items, rather than to any breakdown of those totals. In motor transport traffic surveys therefore, yearly totals for all sizes and classes of truck operations will be the most reliable. Next in reliability will be those breakdowns to which the largest portion of the sample applies. For example, miles per gallon will be much more accurate for gasoline trucks than for diesel trucks, simply because over 99% of all trucks reporting in the sample are gasoline powered. In fact, one would expect that diesel miles per gallon would tend to be very unreliable since there are so few diesel vehicles in any licence or weight group. Similarly, specific statistics for any individual group, licence category or individual survey will be less reliable than the same item reported for all weight groups, all licence categories or all surveys. Furthermore, such things as vehicle operating averages, which will not show great changes from one year to the next, can be improved by comparing one year's results with the next and so on. The fluctuation in diesel mile per gallon results, for example, would be largely eliminated if one could average the results for five or ten years or more.

That is why in many cases certain data breakdowns are not given even though they may have considerable interest. We might wish, for example, to take the miles per gallon as reported by PSV trucks over 15 tons gross weight, and show the results by model or make of vehicle as a matter of interest. Such comparisons would, of course, be very unreliable owing to the small number of reporting units in each category. Consequently, with certain exceptions in the case of statistics to which very great interest attaches and where these statistical limitations are understood, the only results which are being published are those for which a reasonable degree of accuracy is obtained. Exceptions to this rule are noted as they occur.

Expansion Factors: As noted previously, results of individual weekly surveys had to be "expanded" to represent the total truck or bus population and the total period covered. Generally speaking this expansion was achieved by multiplying the sample results by the inverse ratio of the sample to the population and by the ratio of two months to one week. For example, since there are 8.7 weeks in a two month period, time expansion was achieved by multiplying by 8.7 in all cases. Expansion on the basis of the relative size of sample and population was not so simple because the ratio varied with every survey classification for which results were being prepared. There are also complicating factors associated with the breakdown of the gross sample into the various categories of response.

Interesting operating ratios can be obtained by dividing aggregates by other aggregates. These can be calculated on a weekly, bi-monthly or yearly basis. Following are some examples:

<u>Ton miles operated</u>	Average tons per
Total miles operated	= mile (or average load)
<u>Total ton miles produced</u>	Average miles per
Total tons carried	= ton (or average journey)
<u>Total Revenue Earned</u>	Average return per
Total ton miles performed	= ton mile
(Only trucks reporting revenue)	

In similar fashion many other interesting ratios may be obtained, some of which do not have too widespread an interest and hence have not been calculated for inclusion in the published statistical tables. It is suggested that if anyone wishes to obtain a particular ratio not already calculated, they contact the Transportation and Public Utilities Section of the Dominion Bureau of Statistics to make sure that their intended procedure will give the results desired.

Extension of Surveys to Other Provinces

After the first year it was apparent that surveys in Manitoba and in other provinces could be undertaken on a quarterly rather than a bi-monthly basis, with little loss of seasonal variability. This report of the first six bi-monthly surveys of Manitoba trucking covers the 12-month period ending June 30, 1955. Subsequent surveys undertaken in that province are on a quarterly basis.

Very early in the first year of the Manitoba Surveys it became apparent that the technique of statistical sample surveys was feasible and that satisfactory Motor Transport Traffic Statistics

could be gathered on this basis. At one time it was feared that it might be necessary to resort to personal interviews to explain and complete the questionnaires. As soon as the feasibility of the mail survey method was established, plans were drawn for the extension of the survey to other provinces, with the result that Motor Transport Traffic Surveys are now being carried out and established on a regular basis in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia and arrangements are being completed to extend the surveys to the remaining provinces.

Provincial Uniformity of Motor Vehicle Registration Classifications

One of the greatest problems with which the administration of Motor Transport Surveys must contend is the diversity and complexity of motor vehicle registration systems from one province to another. Not only are motor vehicle registration procedures and vehicle classes different but in very few provinces is it possible to accurately break down registrations into the four classes—Urban, Farm, Intercity for hire and Intercity private. This means that for the present very few provinces will be able to make direct comparisons between their own registration figures and the traffic statistics published by DBS. It also means that until provincial registration practice is on a uniform basis, DBS will have the problem of arbitrarily adjusting

on the basis of available information, the individual registration classes so they will meet statistical requirements. This problem will, however, become increasingly important and should be the object of discussions between the Bureau of Statistics and officials of the various provincial registration departments.

In the case of Manitoba where the registration of motor vehicles conforms reasonably well to the four required classes, vehicles were divided on the basis of predominance of operations since in this case such procedure resulted in relatively little inaccuracy.

REVIEW OF SURVEY RESULTS

The Motor Transport Traffic Statistics presented in this report have been obtained by conducting six bi-monthly sample surveys in the Province of Manitoba over the twelve month period July 1, 1954 to June 30th, 1955. The results of each bi-monthly sample survey were expanded or "blown-up" to represent the total performance of all trucks registered in the province as at the time each individual survey was conducted. As each survey was for a seven-day period only, the results were also used to determine an estimate of the traffic performed for a period of two months. The expanded data for each of the six surveys were then added together to obtain total provincial estimates for the twelve month period.

The statistical data obtained from these surveys have been divided into five parts or sections according to type of traffic. Section I contains estimates of the performance of all Manitoba registered trucks regardless of the place where operations were carried out. In other words, traffic performed by Manitoba registered trucks both within and outside the province is presented in Section I. Section II presents estimates of traffic performed by all Manitoba registered trucks within the boundaries of the province only. Section III provides data relating to the operations of Manitoba registered trucks engaged in interprovincial and international traffic. Sections IV and V contain estimates of the traffic performed by Manitoba registered buses, and the data are shown as in Sections I and II.

All trucks registered in the Province of Manitoba are represented in the statistics except those not engaged in transportation services. For the purposes of this survey, vehicles which were not considered to be engaged in transportation services and therefore excluded from the estimates include tow trucks, cranes, diggers, hearses, ambulances, snowmobiles, farm tractors, bull-dozer, graders and cat-tracks. Also excluded were military and other government-owned vehicles, taxis, passenger

automobiles and those trucks which were permitted to transport goods through the province (or intrastate vehicles) without being required to obtain Manitoba licence plates.

The total number of trucks, excluding the non-transportation vehicles mentioned above, registered in Manitoba as at December 31, 1955 was estimated at 56,896. Of this total, 33,293 or 58.5 per cent were farm-owned trucks used mainly in the growing, servicing, and market activities of the farmer; 19,690 trucks or 34.6 per cent were urban in their operations, travelling primarily within city and town limits; 2,503 or 4.4 per cent were private trucks owned by business and industry in the transportation of their own raw materials and finished goods and merchandise; and, 1,410 trucks or 2.5 per cent were common or for hire carriers.

It is emphasized that this estimate of the total truck population was not used to expand the results of the six bi-monthly surveys. In view of the fact that the truck population varies from day to day throughout the year, the results of each individual survey were expanded to represent the truck population as at the time the survey was conducted. The total truck population was determined by multiplying the number of trucks in each weight group selected in the sample by the inverse of the sample selection ratio. For example, trucks in the 7½ to 10 ton group were selected in the ratio of 1 in 20. The total population was thus determined by multiplying the number of trucks selected in the sample by 20. For these two reasons it is, therefore, not possible to obtain additional averages or ratios, comparable to those shown in this report, by using the truck population as at December 31, 1955.

In the tables presented herein, blanks appear in a number of places. This is due to the fact that no vehicles for these particular weight classifications were selected in any of the six samples which were drawn. It does not necessarily follow that

there are no vehicles belonging to these weight classifications in operation in the province.

Section I: The total number of miles travelled by all trucks registered in the province during the year ending June 30, 1955 amounted to 336,227,822 miles of which 47,288,266 miles or 14 per cent were accumulated by common carriers and 36,494,482 miles or 11 per cent by private intercity trucks. On the average, trucks registered in the province travelled 6,839 miles during the year, 54.7 per cent of which were travelled with a load aboard and 45.3 per cent empty. The average length of journey or the average distance each ton of goods was carried was 22.4 miles. For hire trucks averaged 39,341 miles during the period as compared with an average of 15,676 miles for private intercity trucks and carried a cargo of goods 84.9 per cent of the time as against 68.3 per cent for private trucks. The length of journey of for hire trucks averaged 224.7 miles and of private trucks 50.8 miles.

The consumption of fuel amounted to 34,509,794 imperial gallons of gasoline and 244,569 gallons of diesel oil. The latter figure is not a very reliable one, however, as there was a very small number of diesel trucks included in the survey. Gasoline trucks registered in the province averaged 9.7 miles per gallon.

The volume of goods transported by Manitoba registered trucks intraprovincially, interprovincially and internationally totalled 25,301,034 short tons of which 5,027,640 tons or 20 per cent were carried by farm trucks; 17,624,046 tons or 70 per cent by town or urban delivery trucks; 1,323,026 tons or 5 per cent by private intercity vehicles, and 1,326,322 tons or 5 per cent by common carriers. Ton miles performed aggregated 566,591,330, an average of 11,524 ton miles per vehicle. Although for hire carriers transported only 5 per cent of the total goods carried, the distance travelled was much greater with the result that the ton mile performance of this class of vehicle was considerably higher than for all other classes including urban which transported the great bulk of the goods; 298,087,724 ton miles as compared with 268,503,606. The average load or the average tons per total miles travelled was obtained by dividing the total ton miles performed by the total mileage travelled. If the average load of 1.7 tons for all classes of vehicles appears low, it is because the total ton miles was divided by the total mileage travelled rather than the mileage travelled with load only. The average load in this case would be 3.1 tons.

Total capacity ton miles, which was based on the actual mileage travelled during the year rather than on an estimate of the number of miles the vehicles could travel, amounted to 1,052,953,902 ton miles or an average of 21,416 ton miles per vehicle. Using this estimate of capacity, the percentage of capacity utilized was 53.8 per cent for all trucks and 65.6 per cent for the for hire group.

Total revenue received by common or for hire carriers for all services performed amounted to \$18,178,665, an average of \$15,124 per vehicle. Revenue per ton mile was 6.1 cents whereas revenue per total mile, which was obtained by dividing total revenue by the total number of miles travelled, amounted to 38.4 cents.

Section II: This series presents the total amount of traffic performed by Manitoba registered trucks within the boundaries of the province. In addition to the intraprovincial traffic, it includes that portion of interprovincial and international traffic which was performed on Manitoba streets and highways.

The total number of miles travelled by Manitoba trucks within the province amounted to 315,763,596 miles as compared with the grand total of 336,227,822 miles travelled both within and outside the province. The yearly mileage per truck averaged 6,422 miles as against 6,839. Gasoline consumption within the province totalled 30,860,312 gallons. Gasoline trucks thus averaged 10.2 miles per gallon.

In view of the fact that traffic within the province includes that portion of interprovincial and international traffic which is performed in Manitoba, the total volume of goods carried, 25,301,034 tons, is the same as that shown in Section I. Ton miles, however, totalled 381,023,906 as compared with 566,591,330 ton miles performed within and outside the province; and the average ton miles per vehicle dropped to 7,750 from 11,524. Similarly, the average load per vehicle amounted to 1.2 tons as compared with 1.7 and the average journey within the province was 15.1 miles as against 22.4 miles.

Total revenue received by common carriers for the transportation of goods on Manitoba streets and highways amounted to \$9,299,552, an average of \$7,737 per vehicle and 7.6 cents per ton mile.

Section III: This section presents some statistics on interprovincial and international traffic. Table 11 shows the total amount of goods transported out of Manitoba to other provinces and the United States as well as the volume of goods transported into Manitoba from other provinces and the United States. Of the total tonnage carried out of Manitoba, 250,826 tons or 48 per cent were destined for Alberta, 110,981 tons or 21 per cent were transported to Eastern Ontario and 81,360 tons or 16 per cent to Northwestern Ontario. The majority of the goods brought into Manitoba originated in the same three areas.

Table 12 which shows the number of trucks engaged in interprovincial and international traffic analysed by distance travelled and table 13 which presents statistics relating to this traffic analysed by major commodity classifications are results obtained from the six bi-monthly sample surveys. No attempt has been made to expand the data to represent the total truck population or any period

other than the actual survey weeks. This was proved impossible due to the fact that an estimate of the total number of Manitoba registered trucks engaged in this type of operation at the time each individual survey was conducted was not available. The data presented in these tables are provided for general information only and should be used with caution.

Table 12 shows that of the total number of trucks for which completed returns were received in the six surveys, 252 were engaged in inter-provincial or international traffic. Table 13 is similar but shows 337 trucks due to the fact that a number of the vehicles concerned carried more than one kind of commodity.

Section IV: The total number of passengers carried by Manitoba registered buses in intercity services numbered 4,040,916. For the transportation of this number of passengers, bus companies received fares amounting to \$3,783,688. The total number of intercity buses registered in the province travelled 10,138,046 miles; consumed 1,469,506 gallons of gasoline and 131,007 gallons of diesel oil; and performed 170,455,466 passenger miles. On the average each bus received gross revenue of \$20,789 during the twelve month period or 2.2¢ per passenger mile and was utilized to the extent of 46.6 per cent.

Section V: Similar data for the amount of traffic performed by Manitoba registered buses within the provincial boundaries only, which are presented in Section V, show that 3,522,319 passengers were carried and paid \$2,362,313 in fares. The vehicles travelled 6,094,348 miles on Manitoba streets and highways and performed 96,570,119 passenger miles.

Appendix: The appendix to this report provides an analysis of and the degree of response obtained by the use of the random sample system of collecting Motor Transport Traffic Statistics. For the six bi-monthly sample surveys conducted in the province over the twelve month period ending June 30, 1955, questionnaires were sent to the owners or operators of 10,531 trucks. Of this total 5,157 were returned completed and 3,046 were returned with the questions unanswered due to the fact that the vehicles concerned were not operated during the specified survey week for a number of reasons such as "being repaired", "snowbound", "no business" and "operator ill". These questionnaires are however considered to be equivalent to being completed returns as allowance for the average number of vehicles not in operation during the year must be made when expanding the survey results to obtain estimates of the total amount of traffic performed by all registered vehicles in the province. In view of this the total number of satisfactory or completed questionnaires totalled 8,203 or 77.9 per cent of the total number sent. In addition, 1,401 questionnaires were returned but they were incompletely filled out and therefore unusable.

**Section I. Motor Truck Traffic Performed by Manitoba Registered Trucks Both Inside and Outside the Province
July 1, 1954 - June 30, 1955**

TABLE 1. Total Miles Travelled

Class of carrier*	Type of operation	Gross vehicle weight groups						
		0-2½ tons 0-5,000 lbs	2½-5 tons 5,001-10,000 lbs	5-7½ tons 10,001-15,000 lbs	7½-10 tons 15,001-20,000 lbs	10-15 tons 20,001-30,000 lbs	Over 15 tons 30,001 lbs and over	Total
FT T CT PSV	Total mileage travelled							
	Farm.....	13,668,953	66,584,789	8,714,912	8,784,025	3,081,201	—	100,833,880
	Urban.....	30,596,481	68,299,541	13,406,909	25,343,805	12,701,965	1,262,493	151,611,194
	Private.....	5,455	15,911,996	5,399,211	6,782,095	4,151,805	4,243,920	36,494,482
	For hire.....	—	2,410,491	1,940,682	6,138,869	5,709,591	31,088,633	47,288,266
	Total	44,270,889	153,206,817	29,461,714	47,048,794	25,644,562	36,595,046	336,227,822
	Average yearly mileage per truck							
	Farm.....	4,220	3,701	2,083	4,486	12,785	—	3,651
	Urban.....	7,724	7,775	6,812	10,569	15,566	13,723	8,414
	Private.....	5,455	11,910	18,302	18,735	19,961	33,682	15,676
For hire.....	—	24,104	19,803	24,754	34,395	52,692	39,341	
	Total	6,148	5,430	4,501	9,474	17,921	45,179	6,839
FT T CT PSV	Percentage of total mileage travelled empty							
	Farm.....	66.8	62.5	48.8	51.8	52.4	—	60.7
	Urban.....	53.8	50.8	29.4	42.1	48.9	45.8	47.8
	Private.....	0.0	35.7	32.2	22.6	28.0	34.4	31.7
	For hire.....	—	20.0	25.8	26.8	18.7	11.1	15.1
	Total	55.8	53.8	35.4	39.1	39.2	15.0	45.3
	Average journey (average distance per ton)							
	Farm.....	8.7	9.4	10.5	13.8	14.7	—	11.4
	Urban.....	12.0	12.2	7.8	7.5	7.5	12.0	8.2
	Private.....	50.5	37.8	50.5	47.1	37.2	69.4	50.8
For hire.....	—	90.6	41.2	49.5	103.9	339.3	224.7	
	Total	10.7	12.2	11.1	11.0	12.0	169.8	22.4

Definitions*:

FT — Farm trucks — not restricted as to area of operation.

T — Town trucks — restricted to radius of 15 miles of place of registration.

CT — Commercial trucks — operated by business and industry to transport own goods.

PSV — Public service vehicles — for hire trucks operating anywhere in the province according to licence.

**Section I. Motor Truck Traffic Performed by Manitoba Registered Trucks Both Inside and Outside the Province
July 1, 1954 - June 30, 1955**

TABLE 2. Total Fuel Consumption

Type of operation	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Total gallons of gasoline consumed							
Farm.....	1,022,112	5,311,295	886,647	1,012,802	388,299	—	8,621,155
Urban.....	2,290,127	5,676,893	1,581,610	3,231,671	1,848,030	215,825	14,844,156
Private.....	261	1,185,803	550,940	797,894	546,290	727,112	3,808,300
For hire.....	—	231,778	231,034	713,822	839,646	5,219,903	7,236,183
Total.....	3,312,500	12,405,769	3,250,231	5,756,189	3,622,265	6,162,840	34,509,794
Total gallons of diesel oil consumed							
Farm.....	—	—	—	—	—	—	—
Urban.....	—	—	—	13,712	14,661	10,243	38,616
Private.....	—	—	—	—	—	3,653	3,653
For hire.....	—	—	—	—	—	202,300	202,300
Total.....	—	—	—	13,712	14,661	216,196	244,569

**Section I. Motor Truck Traffic Performed by Manitoba Registered Trucks Both Inside and Outside the Province
July 1, 1954 - June 30, 1955**

TABLE 2. Total Fuel Consumption - Concluded

Type of operation	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Miles per gallon of gasoline							
Farm.....	13.4	12.5	9.8	8.7	7.9	—	11.7
Urban.....	13.4	12.0	8.5	7.8	6.8	5.7	10.2
Private.....	20.9	13.4	9.8	8.5	7.6	5.8	9.6
For hire.....	—	10.4	8.4	8.6	6.8	6.0	6.5
Total.....	13.4	12.3	9.1	8.2	7.1	5.9	9.7
Miles per gallon of diesel oil							
Farm.....	—	—	—	—	—	—	—
Urban.....	—	—	—	6.1	5.5	3.9	5.6
Private.....	—	—	—	—	—	7.3	7.3
For hire.....	—	—	—	—	—	6.6	6.6
Total.....	—	—	—	6.1	5.5	6.4	6.2

**Section I. Motor Truck Traffic Performed by Manitoba Registered Trucks Both Inside and Outside the Province
July 1, 1954 - June 30, 1955**

TABLE 3. Total Goods Carried and Ton Miles Performed

Type of operation	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Total tons of goods carried							
Farm.....	159,832	1,895,241	1,047,805	1,328,615	596,147	—	5,027,640
Urban.....	249,162	1,607,801	2,138,488	7,787,284	5,261,465	579,846	17,624,046
Private.....	10	144,424	128,788	359,910	298,670	391,224	1,323,026
For hire.....	—	19,252	90,995	283,979	160,376	771,720	1,326,322
Total.....	409,004	3,666,718	3,406,076	9,759,788	6,316,658	1,742,790	25,301,034
Total ton miles performed							
Farm.....	1,385,192	17,889,144	11,024,933	18,408,798	8,757,901	—	57,465,968
Urban.....	2,988,603	19,642,326	16,615,832	58,148,496	39,503,213	6,975,465	143,873,935
Private.....	505	5,462,640	6,509,735	16,940,820	11,096,700	27,153,303	67,163,703
For hire.....	—	1,744,535	3,748,817	14,052,151	16,669,348	261,872,873	298,087,724
Total.....	4,374,300	44,738,645	37,899,317	107,550,265	76,027,162	296,001,641	566,591,330
Average ton miles per truck							
Farm.....	428	994	2,635	9,402	36,340	—	2,081
Urban.....	754	2,236	8,443	24,249	48,411	75,820	7,964
Private.....	505	4,089	22,067	46,798	53,350	215,502	28,850
For hire.....	—	17,445	38,253	56,662	100,418	443,852	247,993
Total.....	607	1,586	5,791	21,657	53,129	365,434	11,524
Average load (Average tons per total mileage travelled)							
Farm.....	.1	.3	1.3	2.1	2.8	—	.6
Urban.....	.1	.3	1.2	2.3	3.1	5.5	.9
Private.....	.1	.3	1.2	2.5	2.7	6.4	1.8
For hire.....	—	.7	1.9	2.3	2.9	8.4	6.3
Total.....	.1	.3	1.3	2.3	3.0	8.1	1.7

**Section I. Motor Truck Traffic Performed by Manitoba Registered Trucks Both Inside and Outside the Province
July 1, 1954 - June 30, 1955**

TABLE 4. Total Truck Capacity *

	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Total capacity ton miles							
Farm	7,844,949	80,310,625	25,469,554	33,885,233	15,131,211	—	162,641,572
Urban	16,679,033	77,066,306	38,498,263	96,681,651	64,888,926	11,955,238	305,769,417
Private	1,914	18,876,189	14,316,480	27,638,268	21,919,444	47,268,037	130,020,332
For hire	—	3,806,590	5,785,317	26,568,770	28,977,247	389,384,657	454,522,581
Total	24,525,896	180,059,710	84,069,614	184,773,922	130,916,828	448,607,932	1,052,953,902
Capacity ton miles per truck							
Farm	2,422	4,463	6,087	17,306	62,785	—	5,889
Urban	4,211	8,773	19,562	40,318	79,521	129,948	16,969
Private	1,914	14,129	48,530	76,349	105,382	375,143	55,851
For hire	—	38,066	59,034	107,132	174,562	659,973	378,138
Total	3,406	6,382	12,845	37,208	91,486	553,836	21,416
Percentage of capacity utilized							
Farm	17.7	22.3	43.3	54.3	57.9	—	35.3
Urban	17.9	25.5	43.2	60.1	60.9	58.4	47.1
Private	26.4	28.9	45.5	61.3	50.6	57.4	51.7
For hire	—	45.8	64.8	52.9	57.5	67.3	65.6
Total	17.8	24.9	45.1	58.2	58.1	66.0	53.8

* Capacity ton miles was determined by multiplying the actual total number of miles travelled by the difference between gross vehicle weight and estimated tare weight.

**Section I. Motor Truck Traffic Performed by Manitoba Registered Trucks Both Inside and Outside the Province
July 1, 1954 - June 30, 1955**

TABLE 5. Total Revenue from Operations Performed by For hire Carriers

	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Total revenue..... \$	—	285,993	523,030	1,458,322	1,876,549	14,034,771	18,178,665
Revenue per ton mile..... ¢	—	16.4	14.0	10.4	11.3	5.4	6.1
Revenue per mile (total mileage travelled) ¢	—	11.9	27.0	23.8	32.9	45.1	38.4
Average yearly revenue per truck..... \$	—	2,860	5,337	5,880	11,304	23,787	15,124

Section II. Motor Truck Traffic Performed by Manitoba Registered Trucks Within the Province
July 1, 1954 - June 30, 1955

TABLE 6. Miles Travelled Within the Province

Class of carrier*	Type of operation	Gross vehicle weight groups							Total
		0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,000 lbs	5-7½ tons 10,001-15,000 lbs	7½-10 tons 15,001-20,000 lbs	10-15 tons 20,001-30,000 lbs	Over 15 tons 30,001 lbs and over		
FT T CT PSV	Total mileage travelled								
	Farm	13,668,953	66,584,789	8,714,912	8,784,025	3,081,201	—	100,833,880	
	Urban	30,596,481	68,299,541	13,406,909	25,343,805	12,701,965	1,262,493	151,611,194	
	Private	5,455	15,911,996	5,399,211	6,729,008	3,926,501	3,045,652	35,017,823	
	For hire	—	2,319,576	1,905,186	6,138,869	4,801,999	13,135,069	28,300,699	
	Total	44,270,889	153,115,902	29,426,218	46,995,707	24,511,666	17,443,214	315,763,596	
FT T CT PSV	Average yearly mileage per truck								
	Farm	4,220	3,701	2,083	4,486	12,785	—	3,651	
	Urban	7,724	7,775	6,812	10,569	15,566	13,723	8,414	
	Private	5,455	11,910	18,302	18,588	18,877	24,172	15,042	
	For hire	—	23,196	19,441	24,754	28,928	22,263	23,545	
	Total	6,148	5,427	4,496	9,463	17,129	21,535	6,422	
FT T CT PSV	Percentage of total mileage travelled empty								
	Farm	66.8	62.5	48.8	51.8	52.4	—	60.7	
	Urban	53.8	50.8	29.4	42.1	48.9	45.8	47.8	
	Private	0.0	35.7	32.2	22.8	29.5	40.6	32.4	
	For hire	—	21.2	26.2	26.8	20.3	19.2	21.6	
	Total	55.8	51.0	32.9	37.2	39.7	24.9	41.5	
FT T CT PSV	Average journey (Average distance per ton)								
	Farm	8.7	9.4	10.5	13.8	14.7	—	11.4	
	Urban	12.0	12.2	7.8	7.5	7.5	12.0	8.2	
	Private	50.5	37.8	50.5	47.0	34.8	45.1	43.0	
	For hire	—	84.7	41.0	49.5	95.2	114.1	92.5	
	Total	10.7	12.2	11.1	11.0	11.7	64.6	15.1	

Definitions*

FT — Farm trucks — not restricted as to area of operation.
T — Town trucks — restricted to radius of 15 miles of place of registration.
CT — Commercial trucks — operated by business and industry to transport own goods.
PSV — Public service vehicle — for hire trucks operating anywhere in the province according to licence.

Section II. Motor Truck Traffic Performed by Manitoba Registered Trucks Within the Province
July 1, 1954 - June 30, 1955

TABLE 7. Fuel Consumption Within the Province

Type of operation	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
	Total gallons of gasoline consumed						
Farm	1,022,112	5,311,295	886,647	1,012,802	388,299	—	8,621,155
Urban	2,290,127	5,676,893	1,581,610	3,231,671	1,848,030	215,825	14,844,156
Private	261	1,185,803	548,354	792,512	511,572	525,655	3,564,157
For hire	—	226,997	228,250	710,799	703,712	1,961,086	3,830,844
Total	3,312,500	12,400,988	3,244,861	5,747,784	3,451,613	2,702,566	30,860,312
	Total gallons of diesel oil consumed						
Farm	—	—	—	—	—	—	—
Urban	—	—	—	13,712	14,661	10,243	38,616
Private	—	—	—	—	—	2,611	2,611
For hire	—	—	—	—	—	85,216	85,216
Total	—	—	—	13,712	14,661	98,070	126,443

**Section II. Motor Truck Traffic Performed by Manitoba Registered Trucks Within the Province
July 1, 1934 - June 30, 1935**

TABLE 7. Fuel Consumption Within the Province - Concluded

Type of operation	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
	Miles per gallon of gasoline						
Farm	13.4	12.5	9.8	8.7	7.9	—	11.7
Urban	13.4	12.0	8.5	7.8	6.8	5.7	10.2
Private	20.9	13.4	9.8	8.5	7.7	5.8	9.8
For hire	—	10.2	8.3	8.6	6.8	6.4	7.2
Total	13.4	12.3	9.1	8.2	7.1	6.2	10.2
	Miles per gallon of diesel oil						
Farm	—	—	—	—	—	—	—
Urban	—	—	—	6.1	5.5	3.9	5.6
Private	—	—	—	—	—	7.3	7.3
For hire	—	—	—	—	—	6.6	6.6
Total	—	—	—	6.1	5.5	6.4	6.2

**Section II. Motor Truck Traffic Performed by Manitoba Registered Trucks Within the Province
July 1, 1934 - June 30, 1935**

TABLE 8. Goods Carried and Ton Miles Performed Within the Province

Type of operation	Gross vehicle weight group						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
	Total tons of goods carried						
Farm	159,832	1,895,241	1,047,805	1,328,615	596,147	—	5,027,640
Urban	249,162	1,607,801	2,138,488	7,787,284	5,261,465	579,846	17,624,046
Private	10	144,424	128,788	359,910	298,670	391,224	1,323,026
For hire	—	19,252	90,995	283,979	160,376	771,720	1,326,322
Total	409,004	3,666,718	3,406,076	9,759,788	6,316,658	1,742,790	25,301,034
	Total ton miles performed						
Farm	1,385,192	17,889,144	11,024,933	18,408,798	8,757,901	—	57,465,968
Urban	2,988,603	19,642,326	16,615,832	58,148,496	39,503,213	6,975,465	143,873,935
Private	505	5,458,191	6,509,735	16,914,705	10,411,014	17,650,522	56,942,672
For hire	—	1,630,684	3,734,027	14,052,151	15,265,739	88,056,730	122,741,331
Total	4,374,300	44,618,345	37,884,527	107,524,150	73,937,867	112,684,717	381,023,906
	Average ton miles per truck						
Farm	428	994	2,635	9,402	36,340	—	2,081
Urban	754	2,236	8,443	24,249	48,411	75,820	7,984
Private	505	4,084	22,067	46,726	50,053	140,084	24,460
For hire	—	16,307	38,102	56,662	91,962	149,252	102,114
Total	607	1,581	5,788	21,652	51,669	139,117	7,750
	Average load (Average tons per total mileage travelled)						
Farm .....	.1	.3	1.3	2.1	2.8	—	.6
Urban .....	.1	.3	1.2	2.3	3.1	5.5	.9
Private .....	.1	.3	1.2	2.5	2.7	5.8	1.6
For hire	—	.7	2.0	2.3	3.2	6.7	4.3
Total .....	.1	.3	1.3	2.3	3.0	6.5	1.2

**Section II. Motor Truck Traffic Performed by Manitoba Registered Trucks Within the Province
July 1, 1954 - June 30, 1955**

TABLE 9. Truck Capacity Within the Province*

Type of operation	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Total capacity ton miles							
Farm	7,844,949	80,310,625	25,469,554	33,885,233	15,131,211	—	162,641,572
Urban	16,679,033	77,066,306	38,498,263	96,681,651	64,888,926	11,955,238	305,769,417
Private	1,914	18,874,386	14,316,471	27,331,332	20,781,472	34,338,670	115,644,245
For hire	—	3,669,597	5,678,829	26,568,770	27,010,769	154,895,050	217,823,015
Total	24,525,896	179,920,914	83,963,117	184,466,986	127,812,378	201,188,958	801,878,249
Capacity ton miles per truck							
Farm	2,422	4,463	6,087	17,306	62,785	—	5,889
Urban	4,211	8,773	19,562	40,318	79,521	129,948	18,969
Private	1,914	14,128	48,530	75,501	99,911	272,529	49,675
For hire	—	36,696	57,947	107,132	162,715	262,534	181,217
Total	3,406	6,377	12,828	37,146	89,317	248,381	16,310
Percentage of capacity utilized							
Farm	17.7	22.3	43.3	54.3	57.9	—	35.3
Urban	17.9	25.5	43.2	60.1	60.9	58.4	47.1
Private	26.4	28.9	45.5	61.9	50.1	51.4	49.2
For hire	—	44.4	65.8	52.9	56.5	56.9	56.4
Total	17.8	24.8	45.1	58.3	57.9	56.0	47.5

* Capacity ton miles was determined by multiplying the actual number of miles travelled within the province by the difference between gross vehicle weight and estimated tare weight.

**Section II. Motor Truck Traffic Performed by Manitoba Registered Trucks Within the Province
July 1, 1954 - June 30, 1955**

TABLE 10. Revenue from Operations Performed by For Hire Carriers Within the Province

	Gross vehicle weight groups						
	0-2½ tons	2½-5 tons	5-7½ tons	7½-10 tons	10-15 tons	Over 15 tons	Total
Total revenue	—	285,879	523,498	1,458,322	1,342,606	5,689,247	9,299,552
Revenue per ton mile	—	17.5	14.0	10.4	6.8	6.5	7.8
Revenue per mile (total mileage travelled)	—	12.3	27.5	23.8	28.0	43.3	32.9
Average yearly revenue per truck	—	2,859	5,342	5,880	8,088	9,643	7,737

Section III. Motor Truck Traffic Performed by Manitoba Registered Trucks Engaged in Interprovincial and International Traffic

TABLE 11. Total Tons of Goods Carried Into and Out of Manitoba, by Origin and Destination, by Type of Operation

Origin or destination	For hire trucks	Private trucks	All trucks
To North Western Ontario	80,365	995	81,360
From North Western Ontario	43,969	339	44,308
To Eastern Ontario	110,981	—	110,981
From Eastern Ontario	140,242	—	140,242
To Saskatchewan	7,666	68	7,734
From Saskatchewan	12,813	315	13,128
To Alberta	250,532	294	250,826
From Alberta	173,061	248	173,309
To British Columbia	54,235	200	54,435
From British Columbia	32,262	37	32,299
To Quebec	627	—	627
From Quebec	363	—	363
To Maritimes	—	—	—
From Maritimes	13	—	13
To U.S.A.	13,806	—	13,806
From U.S.A.	11,897	—	11,897
Grand total	To	1,557	519,769
	From	939	415,559
	932,832	2,496	935,328

Section III. Motor Truck Traffic Performed by Manitoba Registered Trucks Engaged in Interprovincial and International Traffic

TABLE 12. The Number of Trucks Selected in the Sample which were Engaged in Interprovincial and International Traffic, by Gross Vehicle Weight, by Distance Travelled

Gross vehicle weight	For hire trucks							
	Number of trucks	0-100 miles	101-200 miles	201-500 miles	501-1,000 miles	1,001-1,500 miles	1,501-2,000 miles	Over 2,000 miles
Under 20,000 lbs.	2	—	—	—	—	1	1	—
20,001-25,000 lbs.	5	—	—	1	—	—	—	4
25,001-30,000 "	3	1	—	—	2	—	—	—
30,001-35,000 "	18	—	—	1	2	5	6	4
35,001-40,000 "	73	1	—	9	15	22	11	15
40,001-45,000 "	31	—	—	1	10	10	7	3
45,001-50,000 "	—	—	—	—	—	—	—	—
50,001 and over	85	2	—	3	6	14	23	37
Total	217	4	—	15	35	52	48	63
Gross vehicle weight	Private trucks							
	Number of trucks	0-100 miles	101-200 miles	201-500 miles	501-1,000 miles	1,001-1,500 miles	1,501-2,000 miles	Over 2,000 miles
Under 20,000 lbs.	3	—	1	1	1	—	—	—
20,001-25,000 lbs.	8	1	—	3	4	—	—	—
25,001-30,000 "	—	—	—	—	—	—	—	—
30,001-35,000 "	1	—	—	—	—	—	1	—
35,001-40,000 "	12	—	—	3	5	3	1	—
40,001-45,000 "	10	1	2	1	4	2	—	—
45,001-50,000 "	—	—	—	—	—	—	—	—
50,001 and over	1	—	—	—	—	—	1	—
Total	35	2	3	8	14	5	3	—

Section III. Motor Truck Traffic Performed by Manitoba Registered Trucks Engaged in Interprovincial and International Traffic

TABLE 13. Commodities Carried by Manitoba Registered Trucks in Interprovincial and International Traffic

Commodity classification	For hire trucks							
	No. of trucks	Weight of goods carried	Total miles	Total ton miles	Total revenue	Average load	Average journey	Revenue per ton mile
		tons			\$	tons	miles	¢
Agricultural products	14	138	6,245	62,191	2,338	10.0	451	3.8
Animal and animal products	32	437	28,999	290,046	10,084	10.0	664	3.5
Mine products	4	40	2,301	25,188	1,027	10.9	630	4.1
Forest products	14	166	10,446	118,505	5,222	11.3	714	4.4
Manufacturing and miscellaneous	97	1,164	113,689	984,998	56,278	8.7	846	5.7
N.O.S.—general freight	132	2,889	187,284	2,166,960	100,479	11.6	750	4.6
Total	293	4,834	348,964	3,647,888	175,428	10.5	754	4.8
	Private trucks							
	No. of trucks	Weight of goods carried	Total miles	Total ton miles	Average load	Average journey		
		tons			tons	miles		
Agricultural products	11	326	8,250	96,178	11.7			295
Animal and animal products	1	2	325	682	2.1			341
Mine products	9	97	5,701	47,478	8.3			489
Forest products	1	5	272	1,447	5.3			289
Manufacturing and miscellaneous	9	71	3,185	26,106	8.2			368
N.O.S.—general freight	13	155	7,976	65,745	8.2			424
Total	44	656	25,709	237,636	9.2			362

Note: The data shown above are results obtained during the six surveys conducted during the twelve month period. No attempt has been made to expand the data to represent all Manitoba trucks engaged in these types of operation or to represent any period of time other than the actual survey periods.

Section IV. Motor Bus Traffic Performed by Manitoba Registered Buses Both Inside and Outside the Province, July 1, 1954 – June 30, 1955

TABLE 14. Mileage, Fuel, Passengers and Passenger Miles, Capacity, and Revenue

	Passenger seating capacity				
	0-19	20-29	30-39	40 and over	Total
Mileage:					
Total mileage travelled	49,020	754,816	8,799,970	534,240	10,138,046
Average yearly mileage per bus	8,170	23,588	70,968	25,440	55,704
Average journey (average distance per passenger)	16.7	14.7	56.8	11.2	42.2
Fuel:					
Total gallons of gasoline consumed	4,400	99,320	1,275,142	90,644	1,469,506
Total gallons of diesel oil consumed	—	—	131,007	—	131,007
Miles per gallon of gasoline	11.1	7.6	6.9	5.9	6.9
Miles per gallon of diesel oil	—	—	8.1	—	8.1
Passengers and passenger miles:					
Total number of passengers carried	18,356	464,407	2,708,997	849,156	4,040,916
Total number of passenger miles	306,384	6,805,568	153,856,512	9,487,002	170,455,466
Average number of passengers carried per mile	6.3	9.0	17.5	17.8	16.8
Capacity:					
Total capacity seat miles	575,484	20,594,966	321,992,934	22,935,843	366,099,227
Percentage of capacity utilized	53.2	33.0	47.8	41.4	46.6
Revenue:					
Total passenger revenue	\$ 10,928	178,336	3,399,121	195,303	3,783,688
Revenue per mile (Total mileage travelled)	¢ 22.3	23.6	38.6	36.6	37.3
Revenue per passenger mile	¢ 3.6	2.6	2.2	2.1	2.2
Revenue per bus	\$ 1,821	5,573	27,412	9,300	20,789

**Section V. Motor Bus Traffic Performed by Manitoba Registered Buses Within the Province
July 1, 1954 — June 30, 1955**

TABLE 15. Mileage, Fuel, Passengers and Passenger Miles, Capacity, and Revenue

	Passenger seating capacity				
	0-19	20-29	30-39	40 and over	Total
Mileage:					
Total mileage travelled.....	49,020	738,877	4,772,211	534,240	6,094,348
Average yearly mileage per bus	8,170	23,090	38,485	25,440	33,485
Average journey (Average distance per passenger)	16.7	14.4	36.6	11.2	27.4
Fuel:					
Total gallons of gasoline consumed.....	4,400	97,236	709,096	90,644	901,376
Total gallons of diesel oil consumed	—	—	50,992	—	50,992
Miles per gallon of gasoline	11.1	7.6	6.7	5.9	6.8
Miles per gallon of diesel oil	—	—	9.6	—	9.6
Passengers and passenger miles:					
Total number of passengers carried.....	18,356	463,547	2,191,260	849,156	3,522,319
Total number of passenger miles	306,384	6,668,323	80,108,410	9,487,002	96,570,119
Average number of passengers carried per mile	6.3	9.0	16.8	17.8	15.8
Capacity:					
Total capacity seat miles	575,484	18,650,651	184,982,360	22,935,843	227,144,338
Percentage of capacity utilized	53.2	35.8	43.3	41.4	42.5
Revenue:					
Total passenger revenue..... \$	10,928	156,165	1,999,917	195,303	2,362,313
Revenue per mile (Total mileage travelled)	22.3	21.1	41.9	36.6	38.8
Revenue per passenger mile	3.6	2.3	2.5	2.1	2.5
Revenue per bus	1,821	4,880	16,128	9,300	12,980

APPENDIX I
Sampling Results

Class of carrier	Type of operation	Gross vehicle weight groups						
		0-2½ tons 0-5,000 lbs.	2½-5 tons 5,001-10,000 lbs.	5-7½ tons 10,001-15,000 lbs.	7½-10 tons 15,001-20,000 lbs.	10-15 tons 20,001-30,000 lbs.	Over 15 tons 30,001 lbs. and over	Total
FT T CT PSV	Estimated total Manitoba truck population as of December 31, 1955							
	Farm	3,600	21,840	4,800	2,700	350	3	33,293
	Urban	3,520	10,170	2,080	2,580	1,140	200	19,690
	Private	3	1,440	220	460	240	140	2,503
	For hire	—	120	60	320	200	710	1,410
	Total	7,123	33,570	7,160	6,060	1,930	1,053	56,896
FT T CT PSV	Total number of trucks selected in samples							
	Farm	169	1,905	864	422	261	3	3,624
	Urban	422	1,828	815	996	857	98	5,016
	Private	3	290	115	145	226	130	909
	For hire	—	22	42	97	181	640	982
	Total	594	4,045	1,836	1,660	1,525	871	10,531
FT T CT PSV	Number of questionnaires returned complete							
	Farm	86	864	242	126	89	—	1,407
	Urban	238	957	480	485	395	52	2,607
	Private	1	168	61	101	148	87	566
	For hire	—	16	23	35	108	365	577
	Total	325	2,005	806	777	740	504	5,157
FT T CT PSV	Number of sampled trucks reported not in use during survey week							
	Farm	41	547	472	201	95	2	1,358
	Urban	89	362	190	305	272	33	1,251
	Private	1	73	28	26	46	29	203
	For hire	—	1	5	14	35	179	234
	Total	131	983	695	546	448	243	3,046
FT T CT PSV	Number of questionnaires returned incomplete and unusable							
	Farm	15	210	62	35	27	1	350
	Urban	75	381	92	152	119	9	828
	Private	1	44	22	15	20	10	112
	For hire	—	2	9	14	25	61	111
	Total	91	637	185	216	191	61	1,401
FT T CT PSV	Number of questionnaires not returned (Non-respondents)							
	Farm	27	284	88	60	50	—	509
	Urban	20	128	53	54	71	4	330
	Private	—	5	4	3	12	4	28
	For hire	—	3	5	4	13	35	60
	Total	47	420	150	121	146	43	927

Definitions*

FT — Farm trucks — not restricted as to area of operation.

T — Town trucks — restricted to radius of 15 miles of place of registration.

CT — Commercial trucks — operated by business and industry to transport own goods.

PSV — Public service vehicles — for hire trucks operating anywhere in the province according to licence.

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