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<p>Abstract</p> <p>A survey was conducted with the aim of identifying the major sources of exposure data in Australia. For each source, the following items are listed: name and address of source, how frequently data become available (e.g. quarterly, annually), to what region the data pertain, particulars of any publications available, what supplementary information exists, the limitations that have to be taken into account when using the data, and a description of the data available.</p> <p>The Exposure Inventory is arranged in seven major Sections: Vehicles on Register, Vehicles in Use, Population, Drivers' Licences, Roads Inventory, Traffic Counts, and Meteorological Data.</p> <p>Also included is a discussion of the concept of exposure, how exposure data can be used to obtain a more meaningful interpretation of accident statistics, and the shortcomings of exposure data currently available in Australia. Recommendations are made for further data collection.</p>			
<p><u>NOTE :</u> This report is disseminated in the interest of information exchange. The views expressed are those of the author and do not necessarily represent those of the Commonwealth Government.</p> <p>The Office of Road Safety publishes two series of reports resulting from internal research and external research, that is, research conducted on behalf of the Office. Internal research reports are identified by OR while external reports are identified by CR.</p>			

INVENTORY OF EXPOSURE DATA

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PROJECT SPONSOR:

OFFICE OF ROAD SAFETY

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SUMMARY

The term 'exposure' is used to describe the opportunity of road users to become involved in road traffic accidents. Exposure data are required to enable researchers to make more meaningful and valid interpretations of road accident data. In particular, exposure data are required to derive accident rates for various categories of drivers, vehicles, roads and environmental conditions.

The aim of this study was to determine what exposure data are available in Australia, and to document this information in an INVENTORY OF EXPOSURE DATA. The objectives of the study, the methods used, the information obtained, and the limitations of the Inventory are described in Chapter 1. Chapter 2 contains a discussion of the concept of exposure, why exposure data should be collected, and how this information can be used. In Chapter 3, the shortcomings of exposure data currently available in Australia are discussed, and suggestions are made for further data collection.

The Inventory consists of a series of data sheets, each identified by a 'Record Number'. Each data sheet describes the source, the frequency at which data are published, a list of reports in which data are published, a description of the data available, and an outline of the limitations of the data described. The inventory does not include any data as such (for example, data in tabular form), but lists what kind of information is available and where it can be obtained.

The sources of data are grouped into the following categories: Vehicles on Register, Vehicles in Use, Population, Drivers' Licences, Roads Inventory, Traffic Counts, and Meteorological Data.

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The National Association of Australian State Road Authorities
State Main Roads Departments
National Capital Development Commission, Canberra
Department of Housing and Construction, Canberra
Bureau of Transport Economics, Canberra
State Motor Registries
Australian Bureau of Statistics, Canberra and State Capitals
Australian Road Research Board, Melbourne
State Transport Departments
State Traffic Regulatory Authorities
Department of Transport and Works, Darwin
City Councils in State Capitals
Department of the Capital Territory, Canberra
National Library, Canberra
ADAPS Ltd., Melbourne

CONTENTS

SUMMARY	(i)
ACKNOWLEDGEMENTS	(ii)
CONTENTS	(iii)
1. INTRODUCTION	1
1.1 BACKGROUND TO THE PRESENT STUDY	1
1.2 OBJECTIVES OF THE PRESENT STUDY	1
1.3 HOW THE STUDY WAS CONDUCTED	2
1.4 DATA CONTAINED IN THE EXPOSURE INVENTORY	3
1.5 LIMITATIONS OF THE EXPOSURE STUDY	4
2. THE CONCEPT OF EXPOSURE	6
2.1 DEFINITION OF EXPOSURE	6
2.2 REASONS FOR COLLECTING EXPOSURE DATA	10
3. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	13
3.1 SHORTCOMINGS OF EXPOSURE DATA CURRENTLY AVAILABLE	13
3.2 RECOMMENDATIONS	14
4. EXPOSURE INVENTORY	18
SECTION 1 - VEHICLES ON REGISTER	1-1
SECTION 2 - VEHICLES IN USE	2-1
SECTION 3 - POPULATION	3-1
SECTION 4 - DRIVER' LICENCES	4-1
SECTION 5 - ROADS INVENTORY	5-1
SECTION 6 - TRAFFIC COUNTS	6-1
SECTION 7 - METEOROLOGICAL DATA	7-1
APPENDICES	
1 BIBLIOGRAPHY	
2 LIST OF ABBREVIATIONS USED	

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND TO THE PRESENT STUDY

One of the essential aims of road safety research is to devise countermeasures and determine their effectiveness. Raw accident data, indicating the frequency of occurrence of collisions, are normally not the most suitable basis for judging the effectiveness of a given countermeasure, as such data do not take into account the exposure to risk of relevant groups of road users.

The need to take exposure data into account when using accident statistics has been well established by road safety researchers, both in Australia and overseas. The Office of Road Safety has responded to this need by commissioning the present study.

1.2 OBJECTIVES OF THE PRESENT STUDY

The main objective of this study was to contact the major likely sources of exposure data in Australia and in each case determine:

- what kind of exposure data are available;
- in what way and how frequently this information is generated;
- to what region the data pertain;
- how this information is documented; and
- any limitations or constraints that apply to the data.

It was not intended to reproduce any of the exposure data as such, but merely indicate the sources of information and the kind of data available.

The information collected in this manner was to be compiled in an Inventory of Exposure Data. The consultant was also required to point out the major shortcomings of the exposure data currently available in Australia, and to recommend what further data collection might be desirable.

1.3 HOW THE STUDY WAS CONDUCTED

For the most part, exposure information available in Australia happens to be the incidental by-product of data collection processes which were initiated for entirely different reasons. For example, the State Motor Registration Authorities collect and maintain data on motor vehicles for administrative and control purposes (e.g. to enable vehicles involved in road accidents to be readily identified, to assist in the search for stolen vehicles, and so on).

Nevertheless, in many instances, record systems created for other purposes can become a valuable source of exposure data. At the outset of the assignment it was therefore necessary to identify the principal sources of data that were likely to contain exposure information of one kind or another. The following sources were considered:

- Motor Registration and Drivers' Licencing Authorities;
- State Main Road Authorities and their National Association;
- Australian Bureau of Statistics;
- Public Transport Authorities in capital cities;
- Traffic Regulatory Authorities concerned with goods carrying vehicles, taxis and other special-purpose vehicles;
- Local Government Authorities responsible for traffic signal installations in the Central Business District of capital cities;
- Transportation Planning Authorities;
- Road Safety Authorities;
- motor vehicle manufacturers and private enterprise organisations concerned with the collection and analysis of vehicle registration data;
- motorists' associations and clubs;
- Bureau of Meteorology;
- a number of major libraries.

In the course of the assignment, the consultant conducted personal interviews with officers in these organisations in Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart and Canberra. Information about the Northern Territory was obtained by means of telephone interviews and by correspondence. In each interview, the method of data collection, storage and retrieval used was examined for all those data items which contained exposure information.

In addition, a search of relevant literature was carried out. The result of this literature search is contained in the Bibliography shown in Appendix 1. The study was initiated in July 1978 and concluded in December 1981.

1.4 DATA CONTAINED IN THE *EXPOSURE* INVENTORY

The information on exposure data, included in the Exposure Inventory, is structured in terms of seven major Sections:

section 1 - Vehicles on Register

Data on motor registrations obtained from the State Motor Registration Authorities, motor vehicle census data and motor registration summaries published by the Australian Bureau of Statistics, motor registration data compiled by private organisations, and data obtained from various Transport Regulatory Authorities.

Section 2 - Vehicles in Use

Vehicle usage surveys conducted by the Australian Bureau of Statistics, usage of road vehicles engaged in public transport, vehicle occupancy surveys, trip purpose surveys, trip origin/destination surveys, the National Travel Survey conducted by the Bureau of Transport Economics, seat belt surveys, special purpose vehicle usage surveys, and information on distance travelled and fuel consumption.

Section 3 - Population

Data derived from the Census of Population and Dwellings, and intercensal population estimates published by the Australian Bureau of Statistics.

Section 4 - Drivers' Licences

Data on drivers' licences obtained from State Licencing Authorities.

Section 5 - Roads Inventory

Data obtained from the State Main Roads Authorities and Public Works Departments, the National Association of Australian State Road Authorities, data on traffic signal installations maintained by Local Government Authorities or other agencies, data on railway crossings, tramway routes and highway surveys conducted by private motorists' organisations.

Section 6 - Traffic Counts

Traffic counting data collected by the State Main Road Authorities, Transport Regulatory Authorities and other agencies.

Section 7 - Meteorological Data

Data on rainfall, temperature and other aspects of weather conditions, collected by the Bureau of Meteorology.

1.5 LIMITATIONS OF THE EXPOSURE STUDY

The information contained in the Exposure Inventory suffers from two major shortcomings:

Most of the exposure data available describes exposure only in the broadest possible terms; for example, the total number of persons holding a driver's licence within a State, or the total number of motor vehicles registered in certain categories, etc. It must be borne in mind, however, that in a few selected instances, much more detailed information could be extracted from existing record systems. For instance, the South Australian Motor Registry maintains a data retrieval system that could rapidly generate computer printouts showing the number of licensed drivers by age, sex and residential location together with additional details such as type of licence held and history of past traffic violations.

The second major limitation lies in the scope of the study. The survey conducted in the course of this assignment cannot be considered exhaustive. There is an almost limitless number of possible sources of exposure data. For example, each of the several hundred Local Government Authorities throughout Australia could be expected to maintain some records containing exposure information, such as details of road construction and repair works, occasional traffic counts, details on traffic control signal installations and road signs, and so on. Similarly, there is a very large number of consulting engineers, traffic planning and transportation engineering consultants who have conducted a multitude of transportation studies and feasibility studies which contain exposure data. Another example would be the exceedingly large number of organisations, both in the private and public sector, who

maintain vehicle fleets and thus keep some records pertaining to exposure. Many other examples could be cited.

Therefore the Exposure Inventory presented here can only be regarded as a selected sample of all the sources of exposure information that exist. In drawing the sample of organisations contacted during the survey, every attempt was made to include all those sources that had significant exposure information to offer; no doubt, however, some other important sources may have been omitted. There was, of course, also a constraint on time and funding available which had to be taken into account when conducting the field work.

Two further limitations need to be mentioned. Most of the exposure data items described in the data sheets of the Exposure Inventory are subject to specific limitations (e.g. traffic counts being taken only on certain classes of roads). As mentioned earlier, each data sheet contains a separate paragraph which deals with this aspect, pointing out the limitations arising from the method of data collection, data storage, or the facility for data retrieval that apply in the particular case.

It must also be noted that new exposure data are continually becoming available, and hence it would be desirable for the Exposure Inventory to be updated at periodic intervals.

CHAPTER 2

THE CONCEPT OF EXPOSURE

2.1 DEFINITION OF EXPOSURE

The term 'exposure', as used in this report, is meant to denote the opportunity for road users to become involved in road traffic accidents. A person becomes a road user upon entering the road surface at any point within the network of public roads. The basic notion of exposure is that, as soon as a person occupies the road surface, that person becomes exposed to risk; the mere fact of being on the road providing the opportunity for accident involvement.

Clearly, the more often a person becomes a road user, the greater will be his exposure to risk. However, the question of how exposure ought to be measured cannot be answered uniquely. For example, it could be argued that the more time a person spends on the road, the greater his opportunity for conflict with other road users or objects. Equally, it could be said that the greater the distance travelled, the greater his exposure to risk. Alternatively, the number of trips made might be used as an indicator of exposure. These examples merely illustrate some of the many possible ways in which exposure could be measured in terms of the risk that could be attributed to an individual road user.

It would also be meaningful to think of exposure as an aggregate measure for all road users. Aggregate exposure could be expressed as the total number of vehicles used within a given geographic region, or else it could be the total number of vehicle kilometres travelled per annum for a specified group of vehicles, or the number of persons holding a driver's licence, and so on.

The most commonly used measure of exposure, quoted in overseas literature, is distance travelled. This measure contains the implicit assumption of homogeneity, that is, that each unit of distance travelled involves the same level of risk. However, it would be difficult to support this assumption, as certain traffic situations would generally be regarded as distinctly more hazardous than others. For example,

driving in darkness in heavy rain could be expected to involve greater accident risk when compared to daytime driving in dry weather with unimpaired visibility.

Hence it becomes necessary to view exposure in an overall framework or setting. A setting that appears appropriate could be described in terms of:

- location (which also defines the type of road and all relevant road features);
- time (taking into account the hourly variations during the day, and seasonal variations during the year);
- weather conditions (which may affect visibility, or cause road surfaces to be wet and slippery);
- natural lighting conditions (daylight, dusk and darkness).

Each road user is continually engaged in some form of activity. This may be individual activity, unrelated to other road users (for example, a pedestrian crossing the road at a time when there is no traffic), or else the road user may interact with other road users (e.g. a motor cycle rider overtaking another vehicle travelling in the same direction). The sum total of all such activity gives rise to a particular traffic pattern.

Persons can be road users in different capacities: drivers of vehicles, passengers in vehicles, or pedestrians occupying the road surface. Apart from persons, vehicles could also be regarded as road users, thus comprising a road user category in its own right, including both vehicles in transit and unattended vehicles parked on the road surface. Similarly, uncontrolled animals form a third category of road users: dogs, cats, rabbits, kangaroos and other creatures using the road surface on their own accord.

Thus, the setting within which exposure occurs, can be represented diagrammatically as shown in Figure 1.

In this way, it is possible to relate each exposure situation to a number of specific descriptors, namely:

1. Location (State, region, urban/rural).
2. Road attributes (road type, width, surface condition, etc.).

3. Time (time of day, date).
4. Person attributes (age, sex, role: driver/passenger/pedestrian).
5. Vehicle attributes (type, make, age, state of repair, etc.).
6. Type of activity (e.g. making a right hand turn).
7. Traffic attributes (volume, composition, speed, overtaking).
8. Weather conditions (heavy rain, drizzle, mist, clear, dry, etc.).
9. Natural lighting conditions (daylight, dusk, darkness).

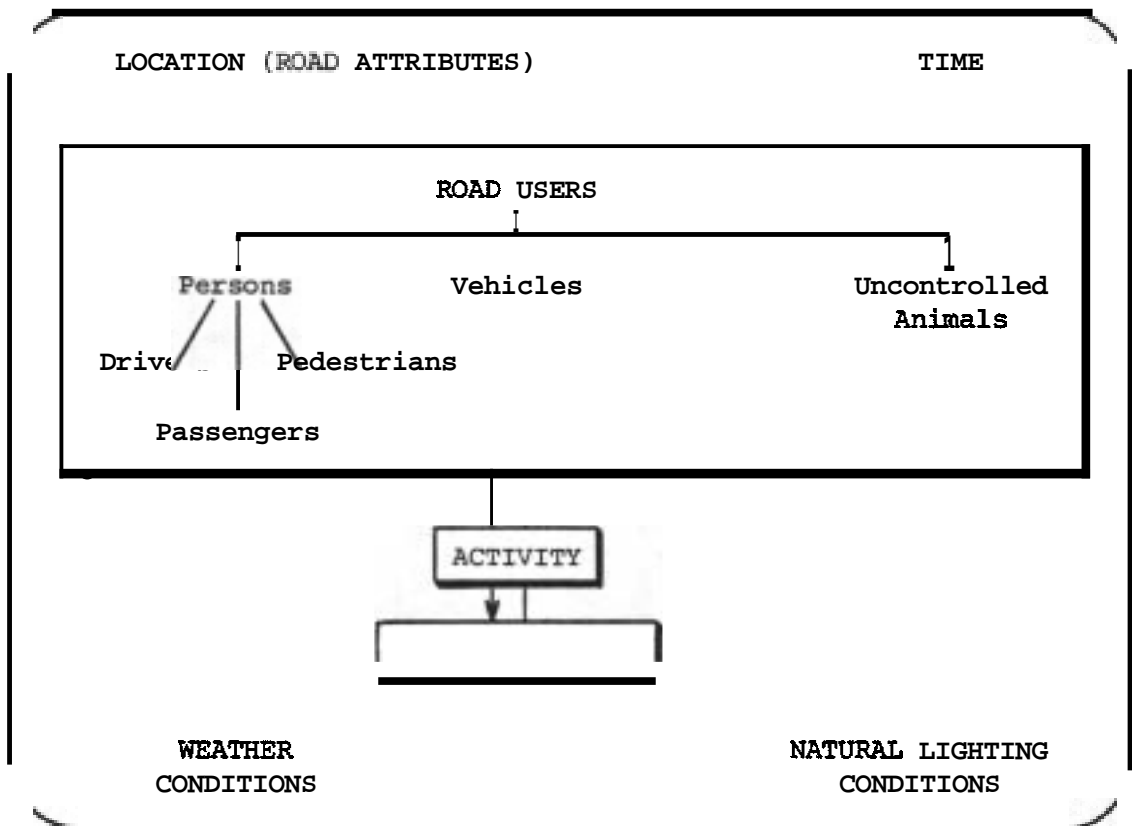


Figure 1

The problem of arriving at a satisfactory definition of exposure has, as yet, not been resolved. This question is succinctly summed up in the Proceedings of the Symposium on Driving Exposure, held at Silver Spring, Maryland, USA, in 1973, which states:

"There is yet no commonly accepted comprehensive definition of exposure. However, most implicit definitions used in the past by various authors relate exposure to the occurrence of traffic hazards or the risk of accident. It was suggested that future definitions should consider the relationship between exposure

and traffic conflicts, and also the possibility of differentiating between amount and intensity of exposure. Driving experience, in terms of miles of travel, remains the most commonly used and accepted 'direct' measure of exposure. Certain 'indirect' measures such as fuel consumption, population, number of licensed drivers, and number of registered vehicles are used occasionally. However, other measures such as driving time, traffic volume or conflicts should be considered. Measures such as passenger distance or time should also be considered in terms of exposure to injury as distinguished from exposure to accident.

Gross exposure, or total accumulated exposure, for a certain area or a given time period, is of little use in studying highway safety problems. Because of this, it is extremely important that exposure data be carefully classified according to different types of travel, types of drivers and vehicles, and types of roadways and environment. Through precise exposure classifications, it is possible to gain insights into the accident causation process. In recent years, research in driving exposure has emphasized the determination of unique exposure classifications. Work done recently at the University of Michigan had led to the recommendation of seven variables which should be used to classify exposure data: driver age, driver sex, vehicle type, vehicle make, model year, road type, and whether driving in daytime or nighttime. While these variables provide the most unique classifications for broad investigations of exposure and accidents, they do not preclude other variables for specialised studies.

Basic uses of exposure data are the identification of highway safety problems and evaluation of countermeasures. For these uses, the most straightforward purpose of exposure data is as the denominator in well-classified accident rates. However, exposure data may also be used in the prediction of accidents, and in the interpretation of existing accident data. Exposure data may also be used independently for analysis of travel trends. Finally, it was noted that 'induced' exposure data (derived solely from accident data) may be used in the same ways as noted above for 'direct' exposure data."

The definition of exposure most widely used in overseas literature is that suggested by Carroll (1971): "Exposure is the frequency of traffic events which create a risk of accident". A much broader definition was submitted by Cerrelly (1972): "Exposure is a measure of movement". Burg (1973) interpreted exposure as "The amount of opportunity for involvement in risk".

Most of the papers and research reports on exposure published overseas are concerned with devising more reliable methods of determining the annual distance driven with the aim of obtaining data in specific categories of drivers, vehicles, roads, times, weather conditions, and so on. A number of studies have also examined the

errors which typically occur between driver-reported data on annual distance driven and that obtained from odometer readings. One of the few overseas studies not concerned with distance driven, but with pedestrians, was a survey of the road usage behaviour of children under ten years of age, carried out by Routledge (1974).

Australian research work specifically related to exposure measurement includes a study conducted by Thorpe (1964), aimed at developing a method for calculating induced exposure from accident records of drivers who were innocently involved in road accidents. Foldvary undertook a number of studies between 1962 and 1977 which were concerned with measuring the annual distance driven by various classes of motorists. A pedestrian exposure study was undertaken in Sydney by P-E Consulting Group (1973) with the aim of determining relative levels of risk which pedestrians encounter when entering the roadway under various conditions. The results of this study were published by Stanton and Cameron (1976). Other pedestrian behaviour studies at intersections were conducted by Cameron and Jordan (1978) in Melbourne, and the Road Traffic Board of South Australia (1969, 1970) in Adelaide.

The overall impression gained, when examining research work conducted in the field of exposure, is that "although there is a strongly perceived need for reliable exposure data" there is little agreement on precisely of what kind, and in what form such data should be documented. There is even less agreement on how such data should be collected to provide results of adequate validity which are also attractively cost-effective.

2.2 REASONS FOR COLLECTING EXPOSURE DATA

The assessment of accident risk in various situations of road usage should not be based on raw accident data alone. To explore this question, it may be useful to consider a simple example. Suppose that in a given geographic region, 100 motor cycle riders had suffered fatal traffic injuries during a twelve month period, and that 100 bicycle riders had also suffered the same fate during the same time span. Could it be concluded from these results that riding a motor cycle is equally hazardous as riding a bicycle?

If it is found that by whatever measure of exposure adopted, motor cycles are used more frequently, over a longer period of time on each trip, travelling a greater distance per annum when compared to bicycles, then it would be rather difficult to sustain the notion that the use of both types of vehicles involves the user in the same level of risk. If distance travelled had been chosen as the basic yardstick of exposure, then the number of fatal accidents per 100,000 km travelled might be a more meaningful indicator of accident risk, when compared to the number of accidents for each vehicle class. For instance, if the average distance travelled per motor cycle were 10,000 km per annum, but only 200 km per annum for bicycles, and if the region in question contained 30,000 motor cycles and 3,000 bicycles, then the total distance travelled per annum would be 300 million km for motor cycles, and 0.6 million km for bicycles. Expressed as the number of fatal accidents per 100,000 km travelled, accident rates of 0.033 for motor cycles, and 16.7 for bicycles are obtained.

In this particular case, distance travelled may not have been the most suitable choice on account of the great disparity between the average annual distance travelled in the two vehicle categories. Possibly, the number of vehicles in use might have been a better choice. On that basis, the measure of risk becomes 0.003 fatal accidents per annum for motor cycles, and 0.033 fatal accidents per annum for bicycles. It could then be said that the chance of the average bicycle user suffering fatal injuries in a traffic accident is about ten times as great as that of an average motor cycle user.

A similar analysis could be carried out into various other aspects: drivers in different age/sex groupings, travel at day or night, or during specific time periods (for example, between 6 pm and 8 pm on Fridays), travel according to trip purpose, travel in certain weather conditions, and so on.

In summary, it is possible to state the main reasons why exposure information should be collected as follows:

1. Accident risk cannot be adequately assessed from accident frequency data alone, without relating accident experience to some measure of the population exposed to risk.

2. The measurement of exposure is aimed at defining the population at risk.
3. Exposure data enables us to express accident risk in terms of a chosen exposure parameter (e.g. the number of accidents per 100,000 km travelled, or the number of accidents per annum per 1,000 male drivers in the age group 18 to 25 years).
4. Exposure data can be used to determine whether there is a significant difference between two or more categories of road usage risk. Therein lies the crucial benefit of exposure information, as it facilitates not only the identification of road usage situations where countermeasures are most urgently needed, but also the measurement of effectiveness of such countermeasures, once implemented.

CHAPTER 3

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

3.1 SHORTCOMINGS OF EXPOSURE DATA CURRENTLY AVAILABLE

The majority of information currently available that is, in one way or another, relevant to the concept of exposure, happens to be a by-product of information systems that have been devised for different purposes. For example, the main aim of traffic counting operations and the gathering of roads inventory data primarily serve purposes such as highway design and traffic management - though they also provide valuable exposure data. The same applies to motor vehicle registrations and drivers' licences records, which are kept for the purpose of maintaining law and order on public roads.

The main data collection procedure specifically aimed at providing exposure information is the Vehicle Usage Survey conducted periodically by the Australian Bureau of Statistics. Certain questions included in the Census of Population and Dwellings (e.g. journey to work data) also fall into this category. Apart from these two items, however, very few surveys are explicitly concerned with gathering exposure data.

In the majority of cases, the task of data collection which yields incidental exposure information is performed by numerous State and Territory authorities such as the State Main Road Authorities and Motor Registries. All too often, very little uniformity is found in content, format and definitions used by the various authorities concerned. For this reason, exposure data generated in one State may not be readily compared with corresponding data gathered in another State. The main exception, where this problem has been overcome, is the set of roads inventory records kept by the State Main Roads Authorities (which are described in Section 5), thanks to the national standards developed by NAASRA.

In terms of comprehensiveness, completeness and degree of detail, exposure data relating to roads inventories could probably be given the highest rating, with traffic counts coming a close second.

Unfortunately, both of these groups of exposure data tend to be limited mainly to roads administered by the State Main Roads Authorities, and hence exclude the majority of municipal, local and secondary roads.

Thus, in terms of availability and scope, location-specific exposure data are reasonably well represented. A good deal of vehicle-specific data are also available: motor vehicle registrations, data on the stock of motor vehicles in use, and the Australian Bureau of Statistics' Vehicle Usage Surveys. The kind of data least well catered for are person-specific data and, in particular, joint person/vehicle specific data. For example, little is known about the characteristics of vehicle occupants in relation to specific usage patterns. Other items that appear to be considerably under-represented are data on pedestrians, bicycle riders and motor cycle riders.

The question of identifying any major gaps in the exposure information currently available in Australia cannot be answered satisfactorily until it becomes clear what kind of exposure data would be of key importance. The relationships implied in Figure 1 suggest that a vast amount of different kinds of exposure data could be collected. what is required, however, is to spell out the specific exposure data items that would be of greatest value, and having identified these, they should be ranked in priority.

3.2 RECOMMENDATIONS

The points raised in the preceding paragraph suggest that the Office of Road Safety should examine what kind of exposure data could be expected to yield the greatest amount of benefit in terms of:

(i) identifying traffic situations where remedial intervention is most urgently needed; (ii) devising suitable countermeasures for such cases; and (iii) assessing the effectiveness of such countermeasures.

Having defined priorities as to the type and scope of information needed, the logical next step would be to estimate the cost of obtaining the data required. Collection of exposure data can be inherently very expensive, and therefore it becomes necessary to relate the value of information to its cost of procurement. An approach along these lines

would certainly go a long way toward ensuring that whatever funds can be made available for future exposure studies, would be expended in the most suitable manner.

Pending such an investigation, there are certain other measures which, at face value, appear to involve very moderate costs yet yield a great deal of useful exposure information. It is recommended that the following schemes be carefully explored in terms of feasibility, the costs involved, and the expected value of the information obtained :

Scheme 1: Annual Kilometres Travelled by Type of Vehicle

Include a mandatory question in every application form for motor vehicle registration, both for initial registrations and for registration renewals, which requires the vehicle owner to state the odometer reading and the date when the reading was taken. Since the registration records already contain comprehensive data on the type of vehicle, such a measure would result in the creation of extremely detailed exposure data on distance travelled for various categories of vehicles. The cost of creating the data would be small, particularly if the odometer reading and the date of reading were not entered into the computer files for each registration transaction, but retained on the hard copy for occasional sampling. In that case, all that would be required to generate the raw data would be a change in the stationery used. The cost of data retrieval, although not negligible, is unlikely to be excessively high if an appropriate sampling method were used.

Scheme 2: Distance Travelled by Type of Vehicle by Type of Driver

For motor vehicles owned by persons (as distinct from those owned by organisations), Scheme 1 could be extended by adding a question which requires the owner to state the estimated percentage of total distance travelled by the vehicle, that was driven by the owner. Since the owner's particulars as to age, sex, residential location, occupation and other relevant attributes are already on record, the exposure information created in this way could provide a large amount of detailed data on the annual distance travelled by owners of vehicles, when using their own vehicle,

by type of vehicle, by type of owner. This would represent a sample of a very large part of total distance travelled by all vehicles per annum " but it would not amount to a census in the same manner as Scheme 1. Although the information obtained would be incomplete, excluding all distance travelled on occasions when the owner was not the driver, it might nevertheless be a most worthwhile means of obtaining exposure data that would indicate some of the important characteristics of the Distance Travelled/Type of Vehicle/Type of Driver relationships. Needless to say, some errors must be expected in the proportion of distance travelled by owners, as reported by owners: this would certainly introduce a further limitation. As in Scheme 1, the cost of creating the raw data would be negligible and the cost of data retrieval might be quite reasonable " particularly if it is borne in mind that data of this kind on a large scale are totally unavailable at present.

Scheme 3: Census of Population and Dwellings

The journey to work data normally collected in the Census of Population and Dwellings (described in Records 2.107 and 3.102) could be replaced by questions aimed at determining each person's estimated total distance travelled as road users, by type of vehicle, during the last 12 months, showing separate data for distance driven and distance travelled as a passenger. Although this data could not be expected to be highly accurate, it would nevertheless provide a valuable insight into the relationships that exist between type of person and distance travelled per annum. In the event of such a replacement of questions, the cost of data collection would be negligible, and the cost of data retrieval is unlikely to be unduly high if a suitable sampling procedure were used.

Scheme 4: Annual Distance Travelled by Holders of a Driving Licence

Questions similar to those mentioned in Scheme 3 above could be included in application forms for the renewal of a driver's licence. Similar limitations as to accuracy of survey results would apply, and the costs incurred would be comparable to those that apply for Scheme 2. Since the majority of drivers' licences

in issue are for a period longer than one year, only a fraction of all drivers would be sampled each year - somewhere between 20% and 40% - depending on the average licensing period that applies in the State or Territory where this information is collected.

One of the key advantages inherent in the four proposals described above is that none of them would require any additional field work (in the way of road traffic observations), and in all cases the act of data creation would involve only a very nominal cost.

The paucity of data on pedestrian and bicycle exposure is less readily remedied. It is difficult to see how such data could be obtained in adequate detail without extensive field research based on road traffic observation, which tends to be inherently expensive - especially when conducted at times or locations of low traffic intensity. The possibility of using aerial photography for daytime observation of pedestrian density on road surfaces at locations other than signal controlled crossings could be investigated. Perhaps similar observations could be made at night time using infra-red film.

It may also be useful to conduct a pilot study using telephone interviewing techniques aimed at determining bicycle ownership, rider and usage characteristics in a sample of households. A survey of this kind could be used to establish the practicality and cost-effectiveness of obtaining bicycle exposure data in this manner. Alternatively, a mailed questionnaire survey with a telephone interview follow-up for non-respondents could be considered.

Another area that could be profitably examined is the question of developing national standards of data definitions and classifications for items of information which are collected on a routine basis by various State and Territory authorities, and which contain an element of exposure. Areas where this might be of particular importance would be: motor vehicle registrations, the issue of drivers' licences, roads inventory data, traffic counting data and operating statistics of public transport organisations.

CHAPTER 4

EXPOSURE INVENTORY

The information contained in the INVENTORY OF EXPOSURE DATA is arranged in seven main Sections:

- Section 1 - Vehicles on Register
- Section 2 - Vehicles in Use
- Section 3 - Population
- Section 4 - Drivers' Licences
- Section 5 - Roads Inventory
- Section 6 - Traffic Counts
- Section 7 - Meteorological Data

For each data source, a separate data sheet is provided. The data sheets are identified by a Record Number. The first digit of each Record Number identifies the Section, as described above. The second digit indicates the State or Territory, according to the following code:

- 1 Australia
- 2 New South Wales
- 3 Victoria
- 4 Queensland
- 5 South Australia
- 6 Western Australia
- 7 Tasmania
- 8 Northern Territory
- 9 Australian Capital Territory

Each data sheet contains seven Paragraphs: Source, Periodicity of Availability, Region of Availability, Published Information, Supplementary Information, Limitations, and Description of Data Available. Where appropriate, the last paragraph contains several Parts, designated (A), (B), etc.

A list of abbreviations used in the Inventory is set out in Appendix 2.

SECTION 1VEHICLES ON REGISTERAustralia

- 1.101 Australian Bureau of Statistics
- 1.102 Registrations of Commonwealth Government-Owned Vehicles
- 1.103 Motor Vehicle Census, 30 September 1979
- 1.104 Motor Vehicle Census, 30 September 1976
- 1.105 Motor Vehicle Census, 30 September 1971
- 1.106 Census of Motor Vehicles, 31 December 1962
- 1.107 Census of Motor Vehicles, 31 December 1955
- 1.108 Survey of Motor Vehicles, 1947-48
- 1.109 Australian Road Travel Information (R.H. BURKE)
- 1.110 ADAPS Motor Vehicle Registration Services

New South Wales

- 1.201 Department of Motor Transport, Sydney

Victoria

- 1.301 Motor Registration Branch, Melbourne
- 1.302 Annual Report of the Transport Regulation Board

Queensland

- 1.401 Motor Vehicle Registration Branch. Brisbane
- 1.402 Annual Report of the Commissioner for Transport

South Australia

- 1.501 Motor Registration Division, Adelaide
- 1.502 Metropolitan Taxi-Cab Board, Adelaide
- 1.503 Work Report of the Road Traffic Board

Western Australia

- 1.601 Road Traffic Authority, Perth
- 1.602 Annual Report of the Transport Commission

Tasmania

- 1.701 Motor Registry, Hobart

Northern Territory

- 1.801 Motor Vehicle Registry, Darwin

Australian Capital Territory

- 1.901 ACT Motor Vehicle Registry, Canberra

The main sources of data on vehicle registrations are the Australian Bureau of Statistics and the State motor registration authorities. Some information is also contained in the annual reports of several State transport regulating authorities (taxi boards, etc.).

The Australian Bureau of Statistics has conducted a number of motor vehicle censuses, the most recent in 1979, although data were not available for this last census when this report was compiled. National data on new registrations and on vehicles on register are published by the ABS central office in Canberra. In addition, most of the ABS branch offices in capital cities publish supplementary data on motor registrations on a State basis.

SECTION 1, VEHICLES ON REGISTER, continued

Certain adjustments to some of the data published by the ABS are discussed by R.H. Burke in his paper 'Australian Road Travel Information'.

Comprehensive data on motor registrations are available to subscribers from ADAPS Ltd., a Melbourne based computer service company.

Data on vehicles on register should be examined in conjunction with information on vehicles in use described in Section 2, particularly in relation to vehicles used by public transport authorities in major cities.

Record 1.101 VEHICLES ON REGISTER - Australia

Australian Bureau of Statistics

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Monthly, quarterly and annually (see paragraph 4 below).

3. Region of Availability

Australia.

4. Published Information

ABS Cat.No. 9301.0 Registration of New Motor Vehicles, Australia,
Preliminary (monthly).
9302.0 Registration of New Motor Vehicles, Make of Vehicles,
Australia (monthly, final issue: June 1976).
9303.0 Motor Vehicle Registrations, Australia (quarterly).
9304.0 Motor Vehicle Registrations, Australia (annual).
9201.0 Rail, Bus and Air Transport, Australia (monthly).

5. Supplementary Information

It would be possible to generate special-purpose computer printouts, showing summaries of various sub-sets of motor registration data on file. This may require modification of existing computer programs or writing new programs. Whilst the Bureau would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current work load of the Bureau's computer programming resources.

Motor registration data are also published by the State Offices of the Australian Bureau of Statistics, and in the Commonwealth and State Year-books. These are described in paragraph 7, parts (F) and (B) below.

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government. (Refer to Record 1.102 for a partial coverage of such vehicles).
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into Australia by short-term overseas visitors.

The Bureau's publications are based on data supplied by the State and Territory Motor Registration Authorities. When examining national data, it must be borne in mind that classification of vehicle types, registration procedures, and other aspects which affect comparability of data may vary from State to State. Intercensal estimates of total vehicles on register are subject to revision up to the date at which a census of motor vehicles has been conducted.

Recent changes in data collection procedures in the Northern Territory have resulted in some difficulties in separately identifying 'factory new' vehicles. Data for Victoria for the period January to March 1979 is subject to revision.

Publication 9302.0 has been discontinued since June 1976.

Record 1.101 (Sheet 2)

7. Description of Data Available

(A) 9301.0 'Registration of New Motor Vehicles, Australia, Preliminary' (monthly)

- (1) Table 1: Number of new motor vehicles registered during the month, by type (motor cars and station wagons, other vehicles), both original and seasonally adjusted, for the last 14 months. Data shown excludes motor cycles, tractors, plant and equipment, caravans and trailers.
- (2) Table 2: Number of new motor vehicles registered during the month, by type (motor cars, station wagons, utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses, motor cycles), for the last 14 months, and totals for the last three financial years. Data shown excludes tractors, plant and equipment, caravans and trailers.
- (3) Table 3: Number of new motor vehicles registered during the month, by State and Territory, for the last 14 months, and totals for the last three financial years. Data shown excludes motor cycles, tractors, plant and equipment, caravans and trailers.
- (4) Table 4: Number of new motor vehicles registered during the most recent month, by type (same categories as for Table 2 above), by State and Territory, by region (capital cities, other areas). Data shown excludes tractors, plant and equipment, caravans and trailers.
- (5) Table 5: Number of new vehicles registered during the most recent month, by type (tractors, plant and equipment, caravans, trailers), by State and Territory, by region (capital cities, other areas).
- (6) Table 6: Number of new motor vehicles registered during the most recent six months period, by type (same categories as for Table 2 above), by State and Territory, by region (capital cities, other areas). Also shown is a comparison, for each State and Territory, of total vehicles for the most recent six months period and the corresponding period the year before. Data shown excludes tractors, plant and equipment, caravans and trailers.

(B) 9302.0 'Registration of New Motor Vehicles, Make of Vehicle, Australia' (monthly)

This publication was discontinued after June 1976. Was Reference No.14.8.

- (1) Table 1: Percentage distribution of new motor vehicles registered during the most recent month, by make (e.g. Holden, Ford, Toyota, Datsun, etc.) for the last four months. Separate listings for three types of vehicles: motor cars and station wagons; light commercial type vehicles: trucks, other truck type vehicles and buses.
- (2) Table 2: Number of new motor vehicles registered as motor cars during the most recent month, by make and model (e.g. Holden Gemini, Holden Torana 1900, Holden Torana 2850, etc.), by State and Territory, by region (capital cities, other areas). For each make and model, the RAC (Royal Automobile club) horsepower rating is shown.
- (3) Table 3: same as Table 2, but for station wagons.
- (4) Table 4: Same as Table 2, but for light commercial type vehicles. For each State, the number of open and closed type of vehicles is also shown.

Record 1.101 (Sheet 3)

- (5) Table 5: Number of new trucks, other truck type vehicles and buses registered during the most recent month, by make (e.g. Mazda, Mercedes Benz, Toyota, etc.), by State and Territory, by region (capital cities, other areas).
- (6) Table 6: Same as Table 5, but for motor cycles.

(C) 9303.0 'Motor Vehicle Registrations, Australia' (quarterly)

- (1) Table 1: Number of new motor vehicles registered during the month, by type (motor cars and station wagons, other vehicles), both original and seasonally adjusted, for the last 21 months. Data shown excludes motor cycles, tractors, plant and equipment, caravans and trailers.
- (2) Table 2: Number of new motor vehicles registered during the month, for the last 12 months, showing the number of actual registrations and the number of processed registrations. Data shown excludes motor cycles, tractors, plant and equipment, caravans and trailers.
- (3) Table 3: Number of new motor vehicles registered during the quarter, by State and Territory, for the last 14 quarters, and totals for the last 6 financial years. Data shown excludes motor cycles, tractors, plant and equipment, caravans and trailers.
- (4) Table 4: Same as Table 3, but for new vehicles registered as motor cars.
- (5) Table 5: Number of new motor vehicles registered during the quarter, by type (motor cars, station wagons, utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses, motor cycles), for the last 14 quarters, and totals for the last 6 financial years. Data shown excludes tractors, plant and equipment, caravans and trailers.
- (6) Table 6: Number of new motor vehicles registered during the most recent quarter, and data for the corresponding quarter in the preceding year, by region (capital cities, other areas); showing separate tabulations for vehicle types (same categories as for Table 5 above), and for States and Territories. Data shown excludes tractors, plant and equipment, caravans and trailers.
- (7) Table 7: Number and percentage of new motor vehicles registered during the most recent quarter, and data for the corresponding quarter in the preceding year, by make (e.g. Fiat, Ford, Holden, Honda, etc.), showing separate data for motor cars and station wagons.
- (8) Table 8: Number of new motor vehicles registered during the most recent quarter, by make, by type (utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses). For each make, the total number of vehicles, and the percentage of total are shown, both for the most recent quarter, and for the corresponding quarter in the preceding year.
- (9) Table 9: Number of new motor vehicles registered as motor cars during the most recent quarter, by make, by State and Territory, by region (capital cities, other areas).
- (10) Table 10: Same as Table 9, but for station wagons.
- (11) Table 11: Same as Table 9, but for utilities.

Record 1.101 (Sheet 4)

- (12) Table 12: Number of new motor vehicles registered as utilities during the most recent quarter, by make, by tare weight (900 and under; 901 to 1,100; 1,101 to 1,300; 1,301 to 1,500; greater than 1,500 kg).
- (13) Table 13: Same as Table 9, but for panel vans.
- (14) Table 14: Same as Table 12, but for panel vans.
- (15) Table 15: Same as Table 9, but for rigid trucks.
- (16) Table 16: Same as Table 12, but for rigid trucks.
Instead of tare weight, gross vehicle mass is indicated
(4,000 and under; 4,001 to 8,000; 8,001 to 12,000;
12,001 to 16,000; 16,001 to 20,000; 20,001 to 30,000;
greater than 30,000 kg) .
- (17) Table 17: Same as Table 9, but for articulated trucks.
- (18) Table 18: Same as Table 16, but for articulated trucks, by gross vehicle mass (8,000 and under; 8,001 to 12,000; 12,001 to 16,000; 16,001 to 20,000; 20,001 to 24,000; 24,001 to 30,000; 30,001 to 50,000; greater than 50,000 kg) .
- (19) Table 19: Same as Table 9, but for other truck types (non-freight carrying vehicles).
- (20) Table 20: Same as Table 9, but for buses.
- (21) Table 21: Same as Table 9, but for motor cycles.
- (22) Table 22: Number of new vehicles registered during the most recent quarter, and data for the corresponding quarter in the preceding year, by region (capital cities, other areas), by State and Territory; showing separate tabulations for tractors, plant and equipment, caravans, trailers.
- (23) Table 23: Number of motor vehicles on register, by State and Territory, as at the end of June and December, for the last 12 six months periods. Separate tabulations are shown for three categories: motor cars and station wagons; utilities, panel vans, rigid and articulated trucks, other truck type vehicles and buses; total motor vehicles (excluding motor cycles, tractors, plant and equipment, caravans and trailers).
- (24) Table 24: Same as Table 23, but for motor cycles.
- (25) Table 25: Number of motor vehicles on register as at the end of the most recent quarter available, by State and Territory, by type (motor cars, station wagons, utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses, motor cycles, total motor vehicles other than tractors etc., tractors, plant and equipment, caravans, trailers, total vehicles).
- (26) Graph of number of new motor vehicles registered during the quarter, showing separate graphs for motor cars and station wagons; utilities and panel vans; trucks, other truck type vehicles and buses; total motor vehicles excluding motor cycles; motor cycles; for the last 17 quarters.

Record 1.101 (Sheet 5)

(D) 9304.0 'Motor Vehicle Registrations, Australia' (annual)

- (1) Table 1: Number of new motor vehicles registered during the month, by type (motor cars and station wagons, other vehicles), both original and seasonally adjusted, for the last 30 months. Data shown excludes motor cycles, tractors, plant and equipment, caravans and trailers.
- (2) Table 2: Number of new motor vehicles registered during the year, per 1.000 of mean population, by State and Territory, by vehicle type (motor cars, station wagons, other vehicles), for the last 5 years. Data shown excludes motor cycles, tractors, plant and equipment, caravans and trailers.
- (3) Table 3: Number of new motor vehicles registered during the year, by type (motor cars, station wagons, utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses, motor cycles), by State and Territory, for the last 5 years.
- (4) Table 4: Number of new motor vehicles registered during the year, by region (capital cities, other areas), for the last 2 years; showing separate tabulations for vehicle types (same categories as for Table 3 above), and for States and Territories. Data shown excludes tractors, plant and equipment, caravans and trailers.
- (5) Table 5: Number and percentage of total of new motor vehicles registered during the year, by make (e.g. Fiat, Ford, Holden, Honda, etc.), for the last 2 years, showing separate data for motor cars and station wagons.
- (6) Table 6: Number of new motor vehicles registered during the most recent year, by make, by type (utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses). For each make, the total number of vehicles, and the percentage of total are shown for the last 2 years.
- (7) Table 7: Number of new motor vehicles registered as motor cars during the most recent year, by make, by State and Territory, by region (capital cities, other areas).
- (8) Table 8: Same as Table 7, but for station wagons.
- (9) Table 9: Same as Table 7, but for utilities.
- (10) Table 10: Number of new motor vehicles registered as utilities during the most recent year, by make, by tare weight (900 and under; 901 to 1,100; 1,101 to 1,300; 1,301 to 1,500; greater than 1,500 kg).
- (11) Table 11: Same as Table 7, but for panel vans.
- (12) Table 12: Same as Table 10, but for panel vans.
- (13) Table 13: Same as Table 7, but for rigid trucks.
- (14) Table 14: Same as Table 10, but for rigid trucks.
Instead of tare weight, gross vehicle mass is indicated
(4,000 and under; 4,001 to 8,000; 8,001 to 12,000;
12,001 to 16,000; 16,001 to 20,000; 20,001 to 30,000;
greater than 30,000 kg) .
- (15) Table 15: Same as Table 7, but for articulated trucks.
- (16) Table 16: Same as Table 10, but for articulated trucks, by gross vehicle mass (8,000 and under; 8,001 to 12,000; 12,001 to 16,000; 16,001 to 20,000; 20,001 to 24,000; 24,001 to 30,000; 30,001 to 50,000; greater than 50,000 kg) .

Record 1.101 (Sheet 6)

- (17) Table 17: Same as Table 7, but for other truck types (non-freight carrying vehicles).
- (18) Table 18: Same as Table 7, but for buses.
- (19) Table 19: Same as Table 7, but for motor cycles.
- (20) Table 20: Number of new vehicles registered during the year, by region (capital cities, other areas), by State and Territory, for the last 2 years; showing separate tabulations for tractors, plant and equipment, caravans, trailers.
- (21) Table 21: Number of motor vehicles on register, by State and Territory, as at the end of December 1920, 1930, 1940, 1950, 1960, 1970; and as at the end of June and December for the last 12 six months periods. Separate tables are shown for four vehicle categories: motor cars and station wagons; utilities, panel vans, rigid and articulated trucks, other truck type vehicles and buses; total motor vehicles (excluding motor cycles, tractors, plant and equipment, caravans and trailers); motor cycles.
- (22) Table 22: Number of motor vehicles on register, per 1,000 of population, by State and Territory, as at the end of December, for the last 18 years, and as at the end of June, for the last 3 years. Separate tables are shown for four vehicle categories (same categories as for Table 21 above).

(E) 9201.0 'Rail, BUS and Air Transport, Australia' (annual)

Number of licensed taxis, and number of licensed hire cars on register by State and Territory, as at the end of June for the last 6 years.

(For Victoria, data on hire cars not available until 1977; for WA, data on taxis pertain to the Perth Metropolitan traffic area since 1973).

(F) Data Published by the State Offices of the Australian Bureau of Statistics

Additional booklets, dealing with motor registrations, are published by the State Offices of the Australian Bureau of Statistics. In the main, the data presented in these publications is of the same kind as the information described in parts (A) to (D) above. The periodicity of availability varies; in some cases it is monthly, or else annually or bi-annually.

(1) New South Wales: ABS Cat.No. 9101.1

'Transport and Communication' (bi-annual).

Section II deals with motor transport.

Contents:

Table 2: Number of motor vehicles on register by vehicle type.

Table 3: Number of public passenger vehicles on register, by vehicle type, by region (Metropolitan, Newcastle and Wollongong Transport District; rest of the State).

Table 4: Number of motor vehicles on register, by vehicle type, by year of manufacture.

Table 5: Number of motor vehicles on register, by vehicle type, by make, by year of manufacture.

Table 6: Number of trucks on register, by type (rigid, articulated), by carrying capacity and by aggregate weight.

Table 7: Number of new motor vehicles registered during the year, by vehicle type.

Table 8: Number of new motor vehicles registered during the year, by make. Separate data shown for three vehicle types: cars; station wagons; trucks, utilities and panel vans.

Record 1.101 (Sheet 7)

(2) Victoria: ABS Cat.No. 9301.2

'Motor Vehicle Registrations' (monthly).

Contents :

Table 1: Number of new motor vehicles registered during the month, by vehicle type.

Table 2: Number of new rigid trucks registered during the month, by make, by gross vehicle mass.

Table 3: Same as Table 2, but for articulated trucks.

Table 4: Number of new motor vehicles registered during the month, by make, by vehicle type.

Table 5: Number of new motor vehicles registered during the month, by type of fuel used, by number of engine cylinders, by type of transmission.

Table 6: Number of new trucks and other truck type vehicles registered during the month, by load carrying capacity, by vehicle type.

Table 7: Number of other new vehicles registered during the month, by vehicle type (tractors, self propelled plant, etc.).

Table 8: Number of motor vehicles on register, by vehicle type.

(3) Queensland: ABS Cat.No. 9301.3

'Motor Vehicle Registrations, Queensland' (monthly).

Contents :

Table 1: Number of new motor vehicles registered during the month, by vehicle type.

Table 2: Number of new motor vehicles registered during the month, by vehicle type, by region (Brisbane Statistical Division, rest of State).

Table 3: Number of new motor vehicles registered during the month, showing actual registrations and processed registrations.

Table 4: Estimated number of motor vehicles on register, by vehicle type.

Table 5: Number of new motor vehicles registered during the month, by make, by number of cylinders, by vehicle type (cars, station wagons, utilities, panel vans).

Table 6: Number of new trucks registered during the month, by make, by mass (either by gross vehicle mass, or by gross combination mass), by type (rigid, articulated).

A summary of motor registration data is also included in:

Cat.No. 9101.3

'Queensland Transport' (annual).

(4) South Australia: ABS Cat.No. 9102.4

'Transport and Communications' (annual)

Contents :

Table 22: Number of motor vehicles on register, by vehicle type.

Number of new motor vehicles registered during the year, by vehicle type.

(5) Western Australia: ABS Cat.No. 9301.5

'Motor Vehicle Registrations' (monthly).

Contents :

Table 1: Number of new motor vehicles registered during the month, by vehicle type.

Table 2: Original and seasonally adjusted data for the number of new motor vehicles registered during the month, by vehicle type.

Table 3: Number of new tractors, plant and equipment, caravans, trailers (by trailer type) registered during the month, by region (Perth Statistical Division, rest of State).

Record 1.101 (Sheet 8)

Table 4: Number of motor vehicles on register, by vehicle type.

Table 5: Number of new motor vehicles registered during the month, by make, by tare weight, by vehicle type.

Table 6: Number of new rigid trucks registered during the month, by make, by gross vehicle mass.

Table 7: Number of new articulated trucks registered during the month, by make, by gross vehicle mass.

Table 8: Number of new motor cycles registered during the month, by make, by region (Perth Statistical Division, rest of State).

A summary of motor registration data is also contained in:

Cat.No. 9101.5

'Transport and Communication, west Australia' (annual).

(6) Tasmania: ABS Cat.No. 9301.6

'Motor Vehicle' Registrations' (monthly).

Contents :

Graph of the number of new motor vehicles registered during the month for 3 groups: cars and station wagons, commercial vehicles, motor cycles, for the last 24 months.

Table 1: Number of new motor vehicles registered during the month, by vehicle type.

Table 2: Number of new motor vehicles registered during the month, by make, by vehicle type.

Table 3: Same as Table 2, but showing a summary for the principal makes only.

Table 4: Number of new motor vehicles registered during the month, by make, by tare weight, by vehicle type.

Table 5: Number of new rigid trucks registered during the month, by make, by gross vehicle mass.

Table 6: Number of new articulated trucks registered during the month, by make, by gross vehicle mass.

Table 7: Number of new motor cycles registered during the month, by make.

Table 8: Number of new tractors, mobile plant and equipment, trailers, caravans registered during the month.

Table 9: Number of motor vehicles on register, by vehicle type.

Number of vehicles per 100 of population.

Table 10: Number of new motor vehicles registered during the year, by vehicle type.

(G) Yearbooks

some information on motor registrations is also contained in the Australian Yearbook, and in the Yearbooks of New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania.

Record 1.102 VEHICLES ON REGISTER - Australia

Registrations of Commonwealth Government-Owned Vehicles

1. Source

Collector and Distributor:

- (1) Australian Bureau of Statistics, Cameron Offices, Belconnen, ACT 2616 (for the period July 1956 to December 1968).
- (2) Department of the Capital Territory, PO Box 158, Canberra City, ACT 2601 (for the period January 1969 to January 1977).
- (3) Department of Administrative Services, PO Box 1920, Canberra City, ACT 2601 (since February 1977).

2. Periodicity of Availability

Monthly and annually (see paragraph 4 below).

3. Region of Availability

Australia.

4. Published Information

- (1) Australian Bureau of Statistics: 'Registration of New Commonwealth-Owned Motor Vehicles (Excluding Defence Service Vehicles)' (monthly, annual).
- (2) Department of the Capital Territory: 'Registration of Australian Government-Owned Vehicles' (monthly).

5. Supplementary Information

Internal documentation of the Australian Government Motor Vehicle Registry (held at the Operations Branch, Transport and Storage Division, Department of Administration Services, Canberra).

6. Limitations

Vehicles belonging to the Defence Services (Navy, Army, Air) are excluded.

The publication of data relating to Commonwealth Government-owned vehicles was discontinued after January 1977, when the administration of the Australian Government Motor Vehicle Registry was transferred to the Department of Administrative Services.

Some departments, or sections of departments, maintain vehicles according to 'regions' which may cover more than one State. In such cases, since separate details for the component of the region are not available, the classification shown is according to the State region.

For example, the Australian Postal Commission and the Australian Telecom Commission include their ACT vehicles in their NSW State region; similarly, their South Australian State region also includes Northern Territory vehicles.

7. Description of Data Available

(A) Australian Bureau of Statistics: 'Registrations of New Commonwealth-Owned Motor Vehicles (Excluding Defence Service Vehicles)' (monthly)

Number of new motor vehicles registered during the most recent month, by vehicle make and model (e.g. Ford Falcon, Ford Fairlane, etc.), by horsepower rating, by State and Territory. Separate listings are shown for each vehicle type (motor cars, station wagons, ambulances and hearses, utilities, panel vans, trucks, other truck type vehicles, omnibuses, motor cycles). Petrol vehicles and diesel vehicles are shown separately.

Record 1.102 (Sheet 2)

(B) Australian Bureau of Statistics: 'Registrations of New Commonwealth-Owned Motor Vehicles (Excluding Defence Service Vehicles)' (annual)

Same as the monthly publication described in part (A) above, with the following additional data: within each vehicle type listing, the total number of vehicles is shown by make. For each State and Territory, the total number of petrol vehicles and diesel vehicles are also shown.

(C) Department of the Capital Territory: 'Registrations of Australian Government-Owned Vehicles' (monthly)

- (1) Number of new motor vehicles registered during the most recent month, by vehicle make (e.g. Chrysler, Ford, Holden, etc.), by tare mass range: same categories as those described in Record 1.101 (C) Items (12), (16), and (18), by State and Territory. Separate listings are shown for each vehicle type (cars, station wagons, utilities, panel vans, rigid trucks, articulated trucks, other truck types, buses, motor cycles, other self-propelled vehicles, trailers and caravans).
- (2) Number of vehicles on register, by vehicle type (same categories as for Item (1) above), by State and Territory. Separate totals for Australia and overseas.

Record 1.103 VEHICLES ON REGISTER - Australia

Motor Vehicle Census, 30 September 1979

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. A motor vehicle census was also conducted in 1976, 1971,
1962, 1955 and 1947-48. (Refer Records 1.104, 1.105, 1.106, 1.107,
1.108).

3. Region of Availability

Australia.

4. Published Information

No data published at the time of writing this report. It is expected
that the information published for the 1979 census will be similar in
presentation and content to that for the 1976 census of motor vehicles.

Record 1.104 VEHICLES ON REGISTER - Australia

Motor Vehicle Census, 30 September 1976

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. A motor vehicle census was also conducted in 1979, 1971, 1962; 1955 and 1947-48. (Refer Records 1.103, 1.105, 1.106, 1.107, 1.108).

3. Region of Availability

Australia.

4. Published Information

ABS Cat.No.	9306.0	Preliminary Statement
	9307.0	Final Statement
	9301.1	New South Wales
	9302.2	Victoria
	9302.3	Queensland
	9301.4	South Australia
	9303.5	Western Australia
	9302.6	Tasmania
	9308.0	Northern Territory
	9305.0	Australian Capital Territory
	9309.0	Australia

5. Supplementary Information

It would be possible to generate special-purpose computer printouts, showing summaries of various sub-sets of motor vehicle data on file. This may require modification of existing computer programs or writing new computer programs. Whilst the Bureau would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current work load of the Bureau's computer programming resources.

6. Limitations

Vehicles belonging to the defence services are excluded, though all other Government-owned vehicles are included.

Also excluded are types of vehicles not normally used on public highways (bulldozers, crawler tractors, graders, mobile cranes, farm vehicles, etc.), and certain vehicles which do use public roads, but are exempt from normal registration requirements (e.g. fire fighting vehicles in some States).

Vehicles bearing diplomatic or consular plates are included.

When comparing motor vehicle data pertaining to different census dates, it must be borne in mind that definitions of vehicle categories, and methods of data collection used may have changed substantially in the course of time. In particular, the categories "utilities" and "panel vans" in 1976 are comparable, but may not be identical, with categories "light commercial" - open and closed" in 1971.

Record 1.104 (Sheet 2)

7. Description of Data Available

(A) 9306.0, 9307.0, Preliminary and Final Statements

Both bulletins have the same layout and type of content.

- (1) Number of motor vehicles on register, by State and Territory, by type of vehicle (motor cars, station wagons, utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses, motor cycles).
- (2) Number of tractors, plant and equipment, caravans, trailers on register, by State and Territory.

(B) Bulletins for the States, Territories and Australia

Each bulletin contains the following information:

- (1) Number of motor vehicles on register, by type of vehicle: motor cars, station wagons, utilities, panel vans, trucks (rigid, articulated), other truck type vehicles, buses, motor cycles. Data shown for three census dates: 30 September 1976, 30 September 1971, 31 December 1962.
- (2) Number of motor vehicles on register per 1,000 of population, by type of vehicle (motor cars and station wagons, other motor vehicles, motor cycles), at the three census dates.
- (3) Number of tractors, plant and equipment, caravans, trailers on register at the three census dates.
- (4) Number of motor vehicles on register, by type of vehicle (same categories as for Item (1) above), by year of manufacture (before 1955, 1955-59, 1960-64, annual data thereafter).
- (5) Number of motor vehicles on register, by make, (e.g. Holden, Ford, etc.), by type of vehicle (same categories as for Item (1) above).
- (6) Number of motor vehicles on register, by make, by year of manufacture (same categories as for Item (4) above). Separate tables are shown for: motor cars, station wagons, utilities, panel vans, rigid trucks, articulated trucks, other truck type vehicles, buses).
- (7) Number of motor vehicles on register, by make, by tare weight (900 and under; 901 to 1,100; 1,101 to 1,300; 1,301 to 1,500; greater than 1,500 kg). Separate tables are shown for: motor cars, station wagons, utilities, panel vans.
- (8) Additional items, included in bulletin 9305.0 (ACT): Number of motor vehicles on register, and number of vehicles per 1,000 of population, by address of registered owner in the Canberra City District (North Canberra, South Canberra, Woden, Belconnen, Western Creek, Tuggeranong), by type of vehicle (same categories as for Item (1) above).
- (9) Additional item, included in bulletin 9309.0 (Australia): Number of motor vehicles on register, by State and Territory, by type of Vehicle (same categories as for Items (1) and (3) above).

Note: The degree of detail shown varies slightly between the bulletins. Bulletin 9308.0 (Northern Territory) does not contain Items (4) and (6).

Record 1.105 VEHICLES ON REGISTER - Australia

Motor Vehicle Census, 30 September 1971

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. A motor vehicle census was also conducted in 1979, 1976, 1962, 1955 and 1947-48. (Refer Records 1.103, 1.104, 1.106, 1.107, 1.108).

3. Region of Availability

Australia.

4. Published Information

ABS Ref.No.	14.15	Preliminary Statement
	14.5.1	New South Wales
	14.5.2	Victoria
	14.5.3	Queensland
	14.5.4	South Australia
	14.5.5	Western Australia
	14.5.6	Tasmania
	14.5.7	Northern Territory
	14.5.8	Australian Capital Territory
	14.5.9	Australia

5. Supplementary Information

Internal records of the Australian Bureau of Statistics.

6. Limitations

Vehicles belonging to the defence services are excluded, though all other Government-owned vehicles are included.

Also excluded are types of vehicles not normally used on public highways (bulldozers, crawler tractors, graders, mobile cranes, farm vehicles, etc.), and certain vehicles which do use public roads, but are exempt from normal registration requirements (e.g. fire fighting vehicles in some states).

Vehicles bearing diplomatic or consular plates are included.

When comparing motor vehicle data pertaining to different census dates, it must be borne in mind that definitions of vehicle categories, and methods of data collection used, may have changed substantially in the course of time.

7. Description of Data Available

(A) 14.15, Preliminary Statement

Number of motor vehicles on register, by State and Territory, by type of vehicle: motor cars, station wagons, light commercial type vehicles (open, closed), trucks of carrying capacity 20 cwt and over (rigid, articulated), other truck type vehicles, buses, motor cycles, tractors, plant and equipment, trailers, caravans.

Record 1.105 (Sheet 2)

(B) Bulletins for the States, Territories and Australia

Each bulletin contains the following information:

- (1) Number of motor vehicles on register, by type of vehicle: motor cars, station wagons, light commercial type vehicles (open, closed), trucks (rigid, articulated), other truck type vehicles, buses, motor cycles. Data shown for two census dates: 30 September 1971, 31 December 1962.
- (2) Number of motor vehicles on register per 1,000 of population, by type of vehicle (motor cars and station wagons, other motor vehicles, motor cycles), at the two census dates.
- (3) Number of tractors, plant and equipment, caravans, trailers on register at the two census dates.
- (4) Number of motor vehicles on register, by type of vehicle (same categories as for Item (1) above), by year of model (before 1950, 1950-54, 1955-59, annual data thereafter).
- (5) Number of motor vehicles (excluding motor cycles) on register, by type of vehicle (same categories as for Item (1) above), by horsepower (in single horsepower increments).
- (6) Number of motor vehicles (excluding motor cars, station wagons, motor cycles) on register, by type of vehicle (same categories as for Item (1) above), by tare weight (under 2 tons, 2 tons and under 2.5 tons, ... 9 tons and over).
- (7) Number of trucks on register, by type of truck (rigid, articulated), by carrying capacity (1 ton and under 2 tons, ... 20 tons and over).
- (8) Number of trucks on register, by type of truck (rigid, articulated), by gross vehicle weight or gross combination weight (1 ton and under 2 tons, ... 30 tons and over).
- (9) Number of motor vehicles on register, by make (e.g. Holden, Ford, etc.), by type of vehicle (same categories as for Item (1) above).
- (10) Number of motor vehicles on register, by make, by year of model (same categories as for Item (4) above). Separate tables are shown for: motor cars, station wagons, open light commercial type vehicles, closed light commercial type vehicles, rigid trucks, articulated trucks, other truck type vehicles, buses.

Note: Items (7) and (8) are not included in three of the bulletins (Northern Territory, Australian Capital Territory, and Australia).

Record 1.106 VEHICLES ON REGISTER - Australia

Census of Motor Vehicles, 31 December 1962

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. A motor vehicle census was also conducted in 1979, 1976, 1971; 1955 and 1947-48. (Refer Records 1.103, 1.104, 1.105, 1.107, 1.108).

3. Region of Availability

Australia.

4. Published Information

ABS Ref.No. 1 New South Wales
2 Victoria
3 Queensland
4 South Australia
5 Western Australia
6 Tasmania
7 Northern Territory
8 Australian Capital Territory
9 Australia

5. supplementary Information

Internal records of the Australian Bureau of Statistics.

6. Limitations

Vehicles belonging to the defence services are excluded, though all other Government-owned vehicles are included.

Also excluded are types of vehicles not normally used on public highways (bulldozers, crawler tractors, graders, mobile cranes, farm vehicles, etc.) .

When comparing motor vehicle data pertaining to different census dates, it must be borne in mind that definitions of vehicle categories, and methods of data collection used, may have changed substantially in the course of time.

7. Description of Data Available

Each bulletin contains the following information:

- (1) Number of motor vehicles on register, by type of vehicle: motor cars (sedans, open cars, convertibles, taxis and hire cars, ambulances and hearses), station wagons, utilities, panel vans, trucks (table top platform, van-type wagon, tipper, cab and chassis, articulated semi-trailer, equipment mounted), other truck type vehicles (tankers, concrete agitators, tow trucks, fire fighting units), omnibuses (mini-buses and minibuses, school buses, tourist buses, interstate and airway buses, double-decker buses, general transport buses), motor cycles solo, side car, motor scooters, wheel chairs), plant and equipment (tractors and heavy equipment, industrial vehicles), trailers (tanker semi-trailers, other semi-trailers, caravans, trailers with equipment or machinery, van-type trailers, platform or box trailers). Data shown for two census dates: 31 December 1962 and 1955.

Record 1.106 (Sheet 2)

- (2) Number of motor vehicles on register, by type of vehicle (motor cars, station wagons, utilities, panel vans, trucks, other truck type vehicles, omnibuses, motor cycles), by year of model (before 1940, 1940-44, 1945-49, annual data thereafter).
- (3) Number of motor vehicles on register, by type of vehicle (same categories as for Item (2) above), by horsepower (in single horsepower increments).
- (4) Number of motor vehicles on register, by tare weight (under 30 cwt, ... 100 cwt and over), by type of vehicle: utilities, panel vans, trucks) table top platform, van-type wagon, tipper, cab and chassis, articulated semi-trailer, equipment mounted, tanker, concrete agitator, tow truck, fire fighting unit), omnibuses (small, school, tourist, interstate and airway, double decker, general transport).
- (5) Number of motor vehicles on register, by carrying capacity (under 20 cwt, ... 240 cwt and over), by type of vehicle: utilities, panel vans, trucks (same categories as for trucks in Item (4) above).
- (6) Number of trucks on register, by aggregate weight (under 50 cwt, ... 360 cwt and over), by type (same categories as for trucks in Item (4) above).
- (7) Number of motor vehicles on register, by make (e.g. Holden, Ford, etc.), by type of vehicle (same categories as for Item (2) above), by year of model (same categories as for Item (2) above), by horsepower (irregular categories).
- (8) Number of motor vehicles on register, by make, by type of vehicle (using categories similar to those in Item (1) above, but with minor modifications). Separate tables are shown for four vehicle categories: motor cars, trucks, omnibuses, motor cycles.
- (9) Number of motor vehicles on register, by make, by type of vehicle (using categories similar to those in Item (1) above, but with minor modifications), by weight and capacity. Tare weight and carrying capacity are shown for four vehicle categories: utilities and panel vans, trucks, diesel powered trucks, interstate trucks. For trucks, aggregate weight is also shown. Tare weight and passenger capacity are shown for two vehicle categories: omnibuses, diesel-powered omnibuses.
- (10) Number of motor vehicles on register (excluding vehicles recorded with the Commonwealth Motor Vehicle Registry), by make, by type of vehicle (same categories as for Item (2) above), by Local Government Areas.
- (11) Number of motor vehicles on register, by make, by type of vehicle (same categories as for Item (2) above), by ownership (private, State Government, Semi-Governmental or Local Government, Commonwealth Government).
- (12) Number of motor vehicles on register at half-yearly intervals, since 31 December 1955, by type of vehicle (motor cars and station wagons; utilities, panel vans, trucks and omnibuses; motor cycles).

Record 1.106 (Sheet 3)

(13) Additional items, included in bulletin No.9 (Australia) only: Number of motor vehicles on register, and number of vehicles per 1,000 of population, by State and Territory, by type of vehicle (same categories as for Item (2) above).

Note: The degree of detail shown varies slightly between the bulletins. Bulletin No.9 (Australia) does not contain Items (10) and (12); whilst Items (4) to (9) are shown in a somewhat more abbreviated form.

Record 1.107 VEHICLES ON REGISTER - Australia

Census of Motor Vehicles, 31 December 1955

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. A motor vehicle census was also conducted in 1979, 1976, 1971, 1962 and 1947-48. (Refer Records 1.103, 1.104, 1.105, 1.106, 1.108).

3. Region of Availability

Australia.

4. Published Information

ABS Ref.No. 1 New South Wales
2 Victoria
3 Queensland
4 South Australia
5 Western Australia
6 Tasmania
7 Northern Territory and ACT
8 Australia

5. Supplementary Information

Internal records of the Australian Bureau of Statistics.

6. Limitations

Vehicles belonging to the defence services are excluded, though all other Government-owned vehicles are included.

Also excluded are types of vehicles not normally used on public highways (bulldozers, crawler tractors, graders, mobile cranes, farm vehicles, etc.).

When comparing motor vehicle data pertaining to different census dates, it must be borne in mind that definitions of vehicle categories, and methods of data collection used, may have changed substantially in the course of time.

7. Description of Data Available

Each bulletin contains the following information:

- (1) Number of motor vehicles on register, by type of vehicle: motor cars (sedan, open, other), station wagons, omnibuses, utilities, panel vans, lorries (platform, van, tipper, articulated or semi-trailer, other), other commercial vehicles, motor cycles.
- (2) Number of motor vehicles on register, by make (e.g. Holden, Ford, etc.), by year of model (prior to 1930, 1930-34, 1935-39, 1940-45, annual data thereafter), by horsepower (in single horsepower increments).
- (3) Number of motor vehicles on register, by make, by type of vehicle (same categories as for Item (1) above), by horsepower (in single horsepower increments).

Record 1.107 (Sheet 2)

- (4) Number of lorries on register, by make, by type of construction (platform, van, tipper, semi-trailer, other). Separate tables are shown for carrying capacity (under 10 cwt, ... 240 cwt and over), and for unladen weight (under 20 cwt, ... 100 cwt and over).
- (5) Number of diesel-powered vehicles on register, by make, by type of vehicle (lorries, omnibuses, other commercial vehicles), by horsepower (in single horsepower increments) .
- (6) Number of motor cycles on register, by make,
- (7) Number of motor vehicles on register, by type of vehicle (motor cars, station wagons, omnibuses, utilities, panel vans, lorries, other commercial vehicles, motor cycles), by Local Government Area.

Note: Item (7) is not included in two of the eight bulletins:
No.7 (NT and ACT), and NO.8 (Australia).

Record 1.108 VEHICLES ON REGISTER - Australia

Survey of Motor Vehicles, 1947-48

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. A motor vehicle census was also conducted in 1979, 1976, 1971, 1962 and 1955. (Refer Records 1.103, 1.104, 1.105, 1.106, 1.107).

3. Region of Availability

Australia.

4. Published Information

ABS Ref-No.	1	Tasmania
	2	Victoria
	3	New South Wales
	4	Western Australia
	5	South Australia
	6	Queensland
	7	Australia

5. Supplementary Information

Internal records of the Australian Bureau of Statistics.

6. Limitations

Separate data for the Northern Territory and the ACT have not been published. It is not stated whether vehicles belonging to the Commonwealth Government, or certain other types of vehicles (e.g. construction and farm vehicles) are excluded.

When comparing motor vehicle data pertaining to different census dates, it must be borne in mind that definitions of vehicle categories, and methods of data collection used, may have changed substantially in the course of time.

7. Description of Data Available

Each bulletin contains the following information:

- (1) Number of motor vehicles on register, by make (e.g. Chevrolet, Ford, etc.), by type of use (private, business), by type of vehicle (cars, utilities, panel vans, trucks and lorries, motor cycles, other vehicles).
- (2) Number of motor vehicles on register, by make, by year of model (1920-29, 1930-39, annually since 1935). Separate tables are shown for four vehicle categories: motor cars, utilities, panel vans, trucks and lorries.
- (3) Number of motor vehicles on register, by make, by horsepower (7, 8, 9, ... 30, over 30 horsepower). Separate tables are shown for two vehicle use categories: private, business.
- (4) Number of motor cars on register, by make, by type of body (sedan, coupe and coupe sedan, roadster, tourer).
- (5) Number of commercial vehicles, other than motor cars, on register, by make, by carrying capacity (9 cwt and under, ... over 100 cwt).

Record 1.109 VEHICLES ON REGISTER - Australia

Australian Road Travel Information

R.H. BURKE

1. Source

Collector and Distributor: Bureau of Transport Economics,
Civic Permanent Centre, Allara Street, Canberra, ACT 2600.

2. Periodicity of Availability

Once-only study, dealing with the period 1962 to 1976.

3. Region of Availability

Australia.

4. Published Information

R.H. Burke (1978). 'Australian Road Travel Information'.
Staff Paper, Bureau of Transport Economics.

5. Supplementary Information

Author's working papers and internal documentation.
Refer also to Record 2.113.

6. Limitations

The main aim of this study was to examine the accuracy and to effect
corrections where necessary of inter-censal motor registration data
published by the Australian Bureau of Statistics.

Data for NSW include ACT motor registrations.

7. Description of Data Available

- (1) Number of motor vehicles on register as at December 31, by State
and Territory, for the period 1962 to 1976. Separate tables are
shown for four vehicle categories: cars and station wagons: other
vehicles excluding motor cycles: total motor vehicles excluding
motor cycles: motor cycles.
- (2) Estimates of petrol and diesel fuel consumption. These are described
more fully in Record 2.113.
- (3) Estimates of vehicle kilometres of travel. These are described more
fully in Record 2.113.

Record 1.110 VEHICLES ON REGISTER - Australia

ADAPS Motor Vehicle Registration Services

1. Source

Collector: State and Territory Motor Registration Authorities.
Distributor: ADAPS Ltd., 135 Inkerman Street, St. Kilda.
Vic. 3182

2. Periodicity of Availability

Monthly. ADAPS commenced the service in 1968.

3. Region of Availability

Australia.

4. Published Information

Detailed motor registration data are supplied to subscribers of the service on a monthly basis. Each subscriber can specify the format and content of data to suit his own requirements. Some data on total registrations are published occasionally in the daily press (in particular 'The Australian', 'Financial Review' and 'The Age').

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

ADAPS Ltd. is a computer service company which has a long standing arrangement with the various State and Territory Motor Registration Authorities to obtain detailed data on motor vehicle registrations. There are very strict constraints on how data supplied can be used by the company or its subscribers.

The company edits the data obtained from the Motor Registration Authorities to ensure that a complete description of each vehicle registered can be included in the records, in accordance with the company's own vehicle classification method. In the course of editing, it is at times necessary to deduce certain data from other related data and this may lead to some errors in classification. For example, the engine size may have to be deduced from the model description or the engine number. It seems unlikely, however, that errors of this kind are significant.

The cost of a subscription to this service could be considerable. It is understood that one major motor vehicle manufacturer is currently paying several thousand dollars a month for a very extensive set of detailed printouts.

All data are limited to registrations of new vehicles. No information is collected on the number of vehicles on register.

7. Description of Data Available

The registration data obtained by ADAPS from the Motor Registration Authorities is set out in the chart below:

Record 1.110 (Sheet 2)

<u>Details</u>	<u>NSW</u>	<u>VIC</u>	<u>QLD</u>	<u>SA</u>	<u>WA</u>	<u>TAS</u>	<u>ACT</u>	<u>NT</u>	<u>CG</u>
Owner's name, address	x	x	x	x	x	x	x	x	-
Registration number	x	x	x	x	x	x	x	x	-
Vehicle make	x	x	x	x	x	x	x	x	x
Body type	x	x	x	x	x	x	x	x	x
Engine horsepower	x	x	=	x	x	x	x	-	-
Tare weight	x	x	*	x	x	-	x	-	x
Gross vehicle mass	x	x	*	=	x	-	-	-	-
Engine number	x	x	x	x	x	-	x	x	-
Fuel type (petrol/diesel)	=	x	x	x	x	-	x	x	-
Number of cylinders	=	-	x	-	-	-	x	-	-
Postcode of Owner	x	x	x	x	x	-	x	x	-
Carrying capacity	x	x	x	-	x	-	-	-	-
Chassis number	x	=	=	=	=	=	=	=	=

Note: CG = vehicles Owned by the Commonwealth Government.

* for Queensland, tare weight and gross vehicle mass (GVM) are obtained only for vehicles of 4 tonne GVM and above.
x = data obtained; - = data not obtained.

ADAPS have recorded the following data items for each new vehicle registered anywhere in Australia since 1968:

- (1) Month and year when the vehicle was registered.
- (2) State or Territory where the vehicle was registered.
- (3) Make and model of vehicle (e.g. Ford Falcon, Ford Fairlane, etc.).
- (4) Engine size (ml).
- (5) Number of cylinders.
- (6) Body type (e.g. sedan, station wagon, panel van, etc.).
- (7) Location code, denoting the address of the registered Owner of the vehicle. Computer printouts can be arranged at five geographical levels: Australia, State or Territory, State metropolitan/rural, country district, Local Government Area. With additional programming, it may also be possible to obtain printouts by place or suburb name, and by postcode. It must be borne in mind, however, that the address of the registered Owner shown in the registration application form does not necessarily correspond to the region within which the vehicle is primarily being used. This is particularly true for vehicles registered by business firms and by Government authorities.
- (8) Type of registered Owner (Commonwealth Government, State Government, Local Government, hospital or other institution, taxi, business, motor vehicle dealer, private owner).
- (9) Fleet size: registered Owners (other than private owners), who register ten or more vehicles during the last 24 months, are identified as 'fleet Owners' and classified according to the number of vehicles registered during that period (10-25, 26-99, 100 or more vehicles).

It is possible to obtain printouts in terms of a variety of desired groupings (e.g. number of vehicles registered in various price categories, in dealer territories of particular motor vehicle manufacturers, etc.).

Record 1.201 VEHICLES ON REGISTER - New South Wales

Department of Motor Transport, Sydney

1. Source

Collector and Distributor: Department of Motor Transport,
50 Rothschild Avenue, Rosebery, NSW 2018.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. Some information is published each year by the Department of Motor Transport in its Annual Report.

3. Region of Availability

New South Wales.

4. Published Information

- (1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State Motor Registration Authorities. (Refer Record 1.101).
- (2) Annual Report of the Commissioner for Motor Transport.

5. Supplementary Information

It would be possible to generate special-purpose computer printouts, shaving summaries of various sub-sets of motor registration data on file. This would normally require writing new computer programs. Whilst the Department would consider favourably any requests from appropriate Authorities for additional data of this kind, such requests would have to be examined against other priorities and the current work load of the Department's computer programming resources.

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into the State by short-term overseas visitors.

The main computer record, the 'Master File', was created in October 1972 from a punch card system. It contains data on all current registrations, and registrations which have not been renewed until the following renewal reminder notice is prepared, which is usually about 10 months later.

It was intended, and still is the Department's intention, to keep a record of all applications for original registration on microfilm but, due to technical difficulties, this procedure has not been implemented. At present, these application forms are kept for a period of 3 years.

Vehicle history data are available on microfilm from 1960 onwards. It should be noted that all microfilm history is retained as a reference record only, and in its present form it is not readily possible to obtain statistical data therefrom.

The computer 'History File' contains data on all transactions effected in relation to a vehicle registration (except renewal payments which are recorded on the 'Master File') for a period of two years but not more than three years. At the end of each calendar year, data which are more than two years old are spooled to microfilm.

Record 1.201 (Sheet 2)

The computer 'Engine Number File' was created from data contained in the 'Master File' as at the time of its conversion to the on-line system in 1972. To this record were added data from a then existing manual register of unrecovered stolen vehicles.

Applications for transfer of aregistration (change of ownership) have been microfilmed since 1 July 1977.

7. Description of Data Available

Details of vehicle registrations are contained in four separate computer files on the on-line system: the 'Master File', 'History File', 'Engine Number File', and 'Transfer Pending File'.

(A) Computer Records: 'Master File'

- (1) Name and address of registered owner.
- (2) Title of registered owner (Mr., Mrs., Messrs. etc).
- (3) Vehicle registration number.
- (4) Registration expiry date.
- (5) Make of vehicle (e.g. Ford, Holden, etc.).
- (6) Body code (type of body construction, designated by a code number. Several hundred different code numbers are used).
- (7) Year of manufacture (not always accurate as this information is supplied by owner in the initial application. Accuracy has improved since the introduction of the compliance plate).
- (8) Engine number.
- (9) Chassis number.
- (10) Engine capacity (ml) .
- (11) Vehicle colour (not recorded for motor cycles).
- (12) Tare weight (not recorded for motor cycles).
- (13) Aggregate weight (recorded for goods-carrying vehicles and some public vehicles).
- (14) Conditions (specifies special operating conditions. For example, approval may be given for a vehicle to be driven without brakes or without some other component normally required, provided that it is used on a specified type of road or geographic region, and under prescribed conditions).
- (15) Type of use (either business or private).
- (16) Tax rate (exemptions and concessions are available in special circumstances; e.g. trailers weighing not more than 250 kg are exempt from tax. Concessions are available to primary producers, ex-servicemen, etc.) .
- (17) Third party insurance company (code number designating the insurer).
- (18) Tenure of registration (registration is normally annual. Quarterly registrations are allowed if the vehicle weighs in excess of two tonnes unladen, or is registered for re-sale by a licensed motor dealer).

Record 1.201 (Sheet 3)

- (19) Form code (signifies the type of stationery used. Different stationery is used for cars, lorries, motor cycles, buses, plant type vehicles such as road rollers, trailers, tractors, and farm equipment).
- (20) Declaration code (indicates the type of declaration to be sent to a registered Owner to qualify for a concession or an exemption).
- (21) Type of tyres (pneumatic, solid).
- (22) Other data: in certain cases, additional data may be recorded. For instance, when a taxi cab is initially registered, the make and number of the taxi meter, and the number of passengers the vehicle is licensed to carry, would also be recorded.

Generally speaking, registration fees, tax levy and weight tax are payable with all registrations. Different scales apply to private cars, business cars, private lorries, omnibuses and tourist vehicles, and motor cycles. Amounts payable are not recorded on individual records but are found from tabular data stored in the system.

For articulated vehicles, owners can choose between two alternative methods of registration: (a) each prime mover and each trailer registered as a separate vehicle; or (b) using the 'interchangeable fleet' method, where the heaviest prime mover is coupled to the heaviest trailer and the combination is registered as one entity; the next heaviest prime mover coupled to the next heaviest trailer, and so on. Any surplus trailers are then registered separately as trailers.

(B) Computer Records: 'History File'

- (1) Previous registered owners and their addresses.
- (2) Previous addresses of the current registered Owner.
- (3) Any changes to vehicle description.
- (4) Previous number plate details.

(C) Computer Records: 'Engine Number File'

This file was designed to detect stolen vehicles or stolen engines fitted to vehicles submitted for registration. (A notation that a vehicle is stolen is also contained in the 'Master File').

- (1) Engine number.
- (2) Make of vehicle.
- (3) Vehicle registration number.
- (4) Year of manufacture.
- (5) Body code (type of body construction, designated by a code number).
- (6) Vehicle colour.

Contains particulars of all notified changes of ownership of a registered vehicle, where authorisation and/or fees are outstanding.

- (1) Vehicle registration number.
- (2) Registration expiry date.

Record 1.201 (Sheet 4)

- (3) Reference to office papers (file reference number).
- (4) Name and address of pending Owner.
- (5) Action being taken.

(E) Initial Application for Registration

The hard copy of the application form for initial registration includes all information contained in the 'Master File', as well as the following additional information:

- (1) Description of vehicle model.
- (2) Number of cylinders.
- (3) Wheel base.
- (4) Name and address of previous Owner.
- (5) Where the vehicle is usually garaged.
- (6) Whether the vehicle is brand new or second hand.
- (7) Market value of vehicle (for levy purposes).

(F) Annual Report of the Commissioner for Motor Transport

- (1) Total number of vehicle registrations in force as at June 30 for the last two years.
- (2) Total number of new vehicles registered during the year.
- (3) Summary of bus statistics: number of operators, services and buses operating in the three Transport Districts (Sydney Metropolitan, Newcastle, Wollongong) at June 30 for the last two years. Number of regular passenger carrying services in country areas as at June 30.
- (4) Number of taxi-cabs and private hire cars by type of licence (unrestricted, restricted to a specified area) in the three Transport Districts, and in country areas as at June 30 for the last two years.
- (5) Number of vehicles licensed as tourist vehicles in the three Transport Districts, and in country areas as at June 30.
- (6) Number of tow-truck licences and tow-truck driver's certificates on issue as at June 30 for the last two years.
- (7) Number of log books for drivers of heavy vehicles issued during the year. (Drivers of vehicles exceeding 2 tonnes unladen are required to maintain log books if they operate the vehicle outside a radius of 80 km from its usual depot, indicating hours of driving and periods of rest).
- (8) Number of goods carrying vehicles and tonnages carried, checked at the two main Lorry Checking Stations (Marulan, Berowra) during the last two years.
- (9) Number of vehicles on register by type of vehicle (cabs, buses, private hire cars, lorries including tractors and trailers, motor cycles, vehicles carrying traders' plates) since 1910. Data for the period 1910-1940 shown as at December 31, 1910, 1911, then every 5 years to 1936, 1939, then every year to 1949. Data since 1950 shown as at June 30 for every year.
- (10) Number of new vehicles registered during the year ended June 30, by type of vehicle (passenger vehicles, goods vehicles, motor cycles) for each year since 1958.

Record 1.301 VEHICLES ON REGISTER - Victoria

Motor Registration Branch, Melbourne

1. Source

Collector and Distributor: Motor Registration Branch, Victoria Police, 560 Lygon Street, Carlton, Vic. 3053.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. Some information is published each year in the Victoria Police Annual Report.

3. Region of Availability

Victoria.

4. Published Information

- (1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State Motor Registration Authorities. (Refer Record 1.101).
- (2) Annual Report of the Victoria Police.

5. Supplementary Information

It would be possible to generate special-purpose computer printouts, showing summaries of various sub-sets of motor registration data on file. This would normally require writing new computer programs. Whilst the Motor Registration Branch would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current work load of the Branch's computer programming resources.

Some information on taxis, buses and goods carrying vehicles is contained in the Annual Report of the Transport Regulation Board (Refer Record 1.302).

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. vehicles not normally used on public highways).
- Vehicles brought into the State by short-term overseas visitors.

The Motor Registration Branch uses the computer facilities of the State Government Computing Service, but maintains its own data entry and programming staff.

A computer data bank was introduced in 1979, which will eventually replace the manual records system. The main features of the computer system are daily batch processing for updating of records, and rapid response enquiry facilities using video-display terminals. This on-line system is expected to be fully developed by the end of 1980.

The main computer record, the 'Current File', at present contains data on all current registrations and registrations which have not been renewed until the following renewal reminder notice is prepared, which is usually about 10 months later. When the on-line system is completed, the 'Current File' will also contain a record of all transactions of vehicles whose registration has not been renewed for up to 2 years.

It is intended to transfer data on all vehicles whose registration has expired for more than 2 years from the 'Current File' to a micro-fiche record system.

Record 1.301 (Sheet 2)

The main manual record is the 'History Card' file which, for each vehicle, contains in a folder the office copy of the six most recent registration renewal certificates, as well as any transfer of ownership documentation. 'History Card' records are filed by expiry date, and within that, in vehicle registration number sequence.

In the past, a manual 'Cardex System' was used, which consisted of index cards showing the vehicle registration number, expiry date, make and type of vehicle: the cards being filed in registration number sequence. This system was used to determine the expiry date for any given vehicle registration number, and thus facilitate access to the 'History Card' containing full particulars, filed in expiry date sequence. With the introduction of the computer system, the 'Cardex System' has only a limited use (e.g. for accessing cancelled records).

The hard copy of the application for initial registration is kept for 5 to 6 years and is then microfilmed. Records of this type are available at least since the 1920's.

7. Description of Data Available

(A) Computer Records: 'Current File'

When the on-line system is fully developed, the 'Current File' will contain the following information:

- (1) Vehicle registration number.
- (2) Vehicle type (car or truck, motor cycle, trailer, recreation vehicle).
- (3) Registration expiry date.
- (4) Name and address of registered owner.
- (5) Registration rate code indicating type of registration.
- (6) Vehicle colour (provision is made for two colours).
- (7) Year of manufacture.
- (8) Vehicle make (e.g. Ford, Holden, etc.).
- (9) Body type (designated by a six character alphabetic code such as SEDAN, S WAG, UTIL, etc. 73 different codes are used).
- (10) Seating capacity.
- (11) Engine number.
- (12) Carrying capacity.
- (13) Tare weight. ('Weight units' are calculated, but not recorded. One weight unit equals tare weight in kilograms divided by 50. Gross vehicle mass is calculated by adding tare weight and carrying capacity).
- (14) Power units (RAC horsepower rating). 'Power mass units' (PMU) are calculated by adding power units and weight units. Power mass units are used for determining the registration rate for certain types of vehicles.
- (15) Body code (code number used to distinguish a truck fitted with a sleeping cabin, and a tow truck).
- (16) Number of wheels.

Record 1.301 (Sheet 3)

- (17) Type of construction (rigid, articulated).
- (18) *GTM* (gross train mass: the maximum permissible mass of the prime mover and trailer if attached).
- (19) Motor cycles: engine capacity (cubic cm) and number of cylinders.
- (20) Trailers: length, width and registration class.
- (21) Date when the vehicle was first registered in Victoria.
- (22) Date when the vehicle was acquired by its present owner.
- (23) Locomotion code: type of fuel used (petrol, diesel, gas, electric, steam). This code is also used to indicate rotary engines.
- (24) Name of proprietor (if any).
- (25) Payment details (receipt number, date payment received, date receipt issued, accounting system machine number).
- (26) Third party insurance details (name of insurance company, whether the insurance fee was paid directly to the insurance company or through the Motor Registration Branch, insurance category).
- (27) Load-share code (indicating the type of approved load-sharing device fitted, if applicable).
- (28) Notation group indicator (denoting the existence of any notations appended to the record and stored in the 'History Data Set').
- (29) History Data Set: past transactions are stored by appending to the vehicle record additional data items. These items together form the 'History Data Set'.

A total of 18 types of records can be appended in this way: 1 vehicle type; 2 expiry date; 3 owner's name and address; 4 owner's name only; 5 postal address only; 6 residential address only; 7 proprietor; 8 rate code; 9 colour(s); 10 year of manufacture, make, body type, seating capacity; 11 engine number; 12 (spare); 13 carrying capacity; 11 engine number; 12 (spare); 13 carrying capacity, tare weight, power units; 14 body code, number of wheels, construction code, locomotion code; 15 gross weight, cubic capacity/trailer length, registration class/number of cylinders; 16 payment details; 17 & 18 stamps and notations appended to vehicle records.

(B) 'History Card' File

The hard copies of the six most recent registration renewal certificates are stored in the 'History Card' file. Each renewal certificate contains the following information:

- (1) Name and address of registered owner.
- (2) Year of manufacture.
- (3) Vehicle make (e.g. Ford, Holden, etc.).
- (4) Body type (e.g. sedan).
- (5) Vehicle registration number.
- (6) Vehicle colour.
- (7) Seating capacity.
- (8) Number of wheels.

Record 1.301 (Sheet 4)

- (9) Registration expiry date.
- (10) Engine number.
- (11) Load-sharing code (indicating the type of approved load-sharing device fitted, if applicable).
- (12) Weight units (the number of weight units equals the tare weight in kilogram divided by 50).
- (13) Power units (RAC horsepower rating).
- (14) PMU (Powermass units: the sum of paver units and weight units).
- (15) Registration fee rate (dollars per PMU).
- (16) Annual registration fee. The registration rate and registration fee is shown for two types of use (private, business) and the owner is required to select the appropriate category. The choice between private and business does not apply to certain types of vehicles.
- (17) GTM (gross train mass: the maximum permissible mass of the prime mover and trailer attached).
- (18) Carrying capacity (maximum permissible load).
- (19) GVM (gross vehicle mass: the sum of tare weight and carrying capacity).
- (20) Tare weight.
- (21) Name and address of proprietor.
- (22) Residential address of registered owner, if not the same as postal address.
- (23) Name of third party insurance company.
- (24) Number of certificate of insurance (in cases where the insurance fee was paid directly to the insurance company).
- (25) Payment details (amount of insurance premium and registration fee paid, and cash register imprint).

(C) Annual Report of the Victoria Police

- (1) Number of vehicles on register on December 31, by vehicle type (private motor cars, commercial and hire motor cars, primary producer motor cars, motor cycles, trailers), for the last two years.
- (2) Number of new vehicles registered during the year, by vehicle type (motor cars, motor cycles, recreation vehicles), for the last two years.

Record 1.302 VEHICLES ON REGISTER - Victoria

Annual Report of the Transport Regulation Board

1. Source

Collector and Distributor: Transport Regulation Board,
Crm. Lygon and Princes Streets. Carlton, Vic. 3053.

2. Periodicity of Availability

Annual.

3. Region of Availability

Victoria.

4. Published Information

Annual Report of the Transport Regulation Board.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Vehicles owned by the Commonwealth Government are not included.

7. Description of Data Available

- (1) Number of licences for passenger carrying vehicles current at June 30, by type of licence (e.g. metropolitan omnibus, Melbourne and Metropolitan Tramways Board bus, Victorian Railways bus, metropolitan charter bus, Ballarat bus, Bendigo bus, Geelong bus, country bus, school bus, etc.), for the last 2 years.
- (2) Metropolitan omnibus services, Melbourne: number of vehicle kilometres travelled and number of passengers carried per quarter for the last 4 quarters, and per annum for the last 2 years. Number of passenger trips per kilometre, for the last 2 years. Number of vehicles used and average distance travelled per vehicle, for the last 2 years.
- (3) Urban omnibus services (combined data for Ballarat, Bendigo and Geelong) : same data as for Item (2) above.
- (4) Country omnibus services: number of vehicles used and average distance travelled per vehicle, for the last 2 years.
- (5) Same as Item (4) above, but for metropolitan charter omnibuses, and for school omnibus services.
- (6) Number of omnibus route services maintained by private operators in the Melbourne metropolitan area, and number of operators.
- (7) A map and listing of all omnibus route services in country areas, showing route number, a description of the service (e.g. Albury-Wodonga-Corryong via Walwa), and name of operator.
- (8) A map showing Melbourne metropolitan taxi zones, location of zone depots, and number of cars at each depot.
- (9) Estimated average annual distance travelled by a metropolitan taxi-cab.
- (10) Number of drivers' certificates (for passenger carrying vehicles and tow trucks) issued during the year, by type of certificate (metropolitan and suburban taxi-cab, private omnibus, other commercial passenger vehicle, tow truck). Also shown is a map indicating the

Record 1.302 (Sheet 2)

number of metropolitan and suburban taxi certificates, and the total number of certificates issued, for the last 8 years.

- (11) Number of licences for goods carrying vehicles current at June 30, by type of licence ('E' licences for discretionary goods carrying). Also shown is a graph depicting the total number of 'E' and 'D' licences current at the end of the year, for the last 10 years, and a pie chart showing the percentage distribution of the various types of licences available (12 'E' and one 'D' categories).
- (12) A map and listing of route services carrying general goods under discretionary licences, showing for each route the route number, a description of the route (e.g. Melbourne-Mt. Martha-Portsea), the number of operators, and the number of vehicles.
- (23) Number of temporary and periodic trip permits issued during the year for goods carrying vehicles (for trips other than specified in the licence), for the last 3 years. Some data is also included on the amount of goods carried (sawn timber, wool, superphosphate, oil and gas products, bulk cement) in particular regions.

Record 1.401 VEHICLES ON REGISTER - Queensland

Motor Vehicle Registration Branch, Brisbane

1. Source

Collector and Distributor: Motor Vehicle Registration Branch,
Department of Main Roads, Boundary Street, Spring Hill, Qld. 4000.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. Some information is published each year by the Department of Main Roads in its Annual Report.

3. Region of Availability

Queensland.

4. Published Information

(1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State Motor Registration Authorities. (Refer Record 1.101).

(2) Annual Report of the Department of Main Roads.

5. Supplementary Information

In addition to the reports described below, it would be possible to generate special-purpose computer printouts of various sub-sets of motor registration data on file. This would normally require writing new computer programs. Whilst the Department would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current work load of the Department's computer programing resources.

Some information on taxis, buses and goods carrying vehicles is contained in the Annual Report of the Commissioner for Transport. (Refer Record 1.402).

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into the State by short-term overseas visitors.

The main computer record, the 'Master File', was created in 1964. It contains data on all current registrations and all vehicles whose registration had not been renewed for up to 12 months.

A total of 13 Regional Registration Offices are maintained; five of these are on-line computer connected to the Brisbane head office (Brisbane, Toowoomba, Southport, Ipswich, Redcliffe), the remaining eight using off-line computer procedures (Maryborough, Gladstone, Mackay, Rockhampton, Bundaberg, Townsville, Cairns, Mt. Isa).

Particulars of vehicles for which registration has been cancelled for 12 months or longer are transferred to a microfiche record system, where the data are arranged in several different sequences: by engine number, by registration number, in alphabetic sequence of Owner name, in sequence of transaction date, and according to registration fees.

Record 1.401 (Sheet 2)

The hard copy of all registration application forms, both for initial registration and for renewals, are kept without time limit. Records of this type are available at least since the 1920's.

For some of the older vehicles, complete information is not available, particularly for vehicles first registered prior to 1964.

7. Description of Data Available

(A) Computer Records: 'Master File'

- (1) Vehicle registration number.
- (2) Windscreen label number (registration sticker number).
- (3) Registration expiry date.
- (4) Previous registration expiry date.
- (5) Gross vehicle or combination weight.
- (6) Tare weight.
- (7) Motor vehicle registration fee, broken into its components (driving fee, nominal defendant fee, third party insurance premium), and previous registration fee.
- (8) New business transaction date.
- (9) Cancellation refund amount.
- (10) ~~Personal~~ plate cancellation date.
- (11) Latest transfer date.
- (12) Vehicle description alteration date.
- (13) Details of expiry date alteration.
- (14) Payment received date.
- (15) Registration cancellation date.
- (16) Fee change date.
- (17) Year of manufacture (in some cases not available, particularly in the case of older vehicles).
- (18) Make of vehicle (e.g. Ford, Holden, etc.).
- (19) Type of engine fuel used (petrol or kerosene, diesel, gas, electricity).
- (20) Number of cylinders.
- (21) Whether the vehicle has left hand drive.
- (22) Whether the vehicle is new or second hand.
- (23) Body code (type of body construction, designated by a code number. 62 different code numbers are used).
- (24) Number of axles.
- (25) Vehicle colour.
- (26) Previous registration number.
- (27) Name of third party insurance company.
- (28) Third party insurance category.

Record 1.401 (Sheet 3)

- (29) Whether third party insurance has been declined.
- (30) Engine number (Note: chassis number is not recorded).
- (31) Whether vehicle is fitted with a compliance plate.
- (32) Local Government Authority code number of registered owner's residence.
- (33) Name and address of registered Owner, also showing company name where applicable.
- (34) Name and address of previous owner.

(B) Microfiche Records: Cancelled Registrations

Particulars of vehicles which have been cancelled or whose registration has not been renewed for 12 months are removed from the 'Master File' and entered into microfiche records of cancelled registrations. For ease of retrieval, these records are arranged in several different sequences: by engine number, by registration number, in alphabetic sequence of Owner name, in sequence of transaction date, and according to registration fees.

(C) Internal Reports

A number of internal reports, in the form of computer printouts are prepared annually, and in some cases weekly or monthly. For example, one such report shows the number of vehicles on register as at June 30, by type of vehicle, by Local Government Authority code number (arranged according to Department of Main Roads Districts). Further information on internal reports of this kind can be obtained from the Motor Vehicle Registration Branch, Brisbane.

(D) Annual Report of the Department of Main Roads

- (1) Number of vehicles on register at the beginning and at the end of the financial year, by type of vehicle (cars, recreation vehicles, utilities, trucks, industrial equipment, buses, ambulances, motor cycles).
- (2) Number of new registrations, and number of registrations cancelled during the year, by type of vehicle (same categories as for Item (1) above).
- (3) Increase or decrease in the number of vehicles on register between the beginning and end of the financial year, by type of vehicle (same categories as for Item (1) above).

Note: Unlike in most other States, in Queensland motor registrations and drivers' licences are administered by two separate authorities - the former by the Department of Main Roads, and the latter by the Department of Transport.

Record 1.402 VEHICLES ON REGISTER - Queensland

Annual Report of the Commissioner for Transport

1. Source
Collector and Distributor: Department of Transport,
230 Brunswick Street, Fortitude Valley, Qld. 4006.
2. Periodicity of Availability
Annual.
3. Region of Availability
Queensland.
4. Published Information
Annual Report of the Commissioner for Transport.
5. Supplementary Information
Internal documentation and working papers.
6. Limitations
Vehicles owned by the Commonwealth Government are not included.
7. Description of Data Available
 - (1) Number of licensed cabs, by region (Brisbane Metropolitan Taxi District, remainder of State) and by type of licence (taximeter cabs, exempted cabs).
 - (2) Number of private hire cars.
 - (3) Number of vehicles to be let for hire, including sedans, goods carrying vehicles, four wheel drive vehicles and campervans.
 - (4) Number of passenger services licences granted to private bus companies, Number of buses approved under these licences, and total passenger carrying capacity of these vehicles. Also included is a map showing the routes operated by licensed long distance bus services.
 - (5) Number of permits to carry goods or passengers, by type of goods (general goods, ancillary services, miscellaneous), and by type of passenger services (general road services including school buses, airline buses, tourist services, charter services, miscellaneous services).
 - (6) Number of tow truck operator's licences and number of tow truck vehicle licences. Also shown are the number of tow truck driver's certificates and number of tow truck assistant's certificates.

Record 1.501 VEHICLES ON REGISTER - South Australia

Motor Registration Division, Adelaide

1. Source

Collector and Distributor: Motor Registration Division, Department of Transport, 60 Wakefield Street, Adelaide, SA 5000.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. 'Some information is published by the Motor Registration Division in its Annual Report.

3. Region of Availability

South Australia.

4. Published Information

(1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State Motor Registration Authorities. (Refer Record 1.101).

(2) Annual Report of the Motor Registration Division (first published 1978-79).

5. Supplementary Information

In addition to the reports described below, it would be possible to generate other special-purpose computer printouts of various sub-sets of motor registration data on file. This may require modification of existing computer programs or writing of new programs. Whilst the Motor Registration Division would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current work load of the Division's computer programming resources.

Some information on taxis is contained in the Annual Report of the Metropolitan Taxi-Cab Board. Data on over-weight and over-dimensioned vehicle permits and other special permits granted are shown in the Annual Report of the Road Traffic Board. (Refer Records 1.502 and 1.503 respectively).

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into the State by short-term overseas visitors.

The Motor Registration Division is using the computer facilities of the State Government Automatic Data Processing Centre, but maintains its own data entry and programming staff.

The main computer record, the 'Current File', is updated once a week, using batch processing. Plans for an on-line system have been considered, but have been deferred for the time being. Computer processing was introduced in 1968.

The 'Current File' contains data on all current registrations, and registrations which have not been renewed for up to 12 months.

Data on vehicles whose registration has not been renewed for a period between 12 and 24 months are transferred from the 'Current File' to the 'History File'.

Record 1.501 (Sheet 2)

Registrations not renewed for more than 24 months are transferred from the 'History File' to a micro-fiche record system.

The hard copy of all registration application forms, both for initial registration and for renewals, are kept for 4 years, after which they are destroyed.

Vehicles owned by the State Government are all renewed at the end of February each year. Postcode numbers are not recorded for these vehicles.

7. Description of Data Available

Details of vehicle registrations are contained in two separate computer files: the 'Current File' and 'History File'.

(A) Computer Records: 'Current File'

The information stored varies to some extent according to the three main groups of vehicles: motor cycles, other types of motor vehicles, and trailers.

Common data for all vehicle types:

- (1) Vehicle class (motor vehicle, motor cycle, trailer, trader's plate).
- (2) Vehicle registration number.
- (3) Date first registered or acquired.
- (4) Registration expiry date.
- (5) Label number (vehicles with windscreens are issued with registration labels, and those without windscreens with registration cards suitable for placement in a special holder).
- (6) Number of registered owners.
- (7) Number of duplicate labels issued.
- (8) Name and address of registered owner.
- (9) Body code (type of body construction, designated by a code number. 40 different code numbers are used).
- (10) Make of vehicle (e.g. Ford, Holden, etc.). Provision is made for recording of rare or non-standard makes.
- (11) Fee category (for motor vehicles: private and non-commercial, light commercial, heavy commercial; for motor cycles: ordinary cycles, auto cycles and cycles 50 kg or less; for trailers: machine on wheels - e.g. concrete mixer, all other types of trailers).

Data for motor vehicles (other than motor cycles):

- (12) Engine number.
- (13) Year first registered (in most cases, this would indicate the year of manufacture).
- (14) Horsepower rating.
- (15) Tare weight.
- (16) Type of tyres (pneumatic, solid rubber, metal).
- (17) Whether the vehicle has left hand drive.
- (18) Type of engine fuel used (petrol, diesel, electric, steam, kerosene, gas).

Record 1.501 (Sheet 3)

- (19) Whether the vehicle is a commercial vehicle with assessed load capacity, or a bus with assessed seating capacity.
- (20) Whether a windscreen is fitted.
- (21) Vehicle colour (16 categories).
- (22) Whether any additional equipment is fitted (26 categories; e.g. twin steer axle, crash bars, air conditioner, etc).
- (23) Bus inspection code (specifying the inspection procedures required if the vehicle is a bus).

Data for motor cycles:

- (24) Engine number.
- (25) Engine capacity (cubic cm) .

Data for trailers:

- (26) Chassis number.
- (27) Year first registered (in most cases this would indicate the year of manufacture).
- (28) Number of road tyres fitted.
- (29) Number of rows of wheels.
- (30) Trailer mass.
- (31) Type of tyres (pneumatic, solid rubber, metal).
- (32) Whether the trailer is fitted with any glass windows (on to which a registration label can be placed).
- (33) Vehicle colour (16 categories) .

Items (1) to (33) described above represent the 'standard record'.

For some vehicles, certain additional items are recorded. Provision is made for the following extra items:

Data for motor vehicles (other than motor cycles):

- (34) Whether a semi-rigid type of vehicle.
- (35) Number of road tyres fitted.
- (36) Number of rows of wheels.
- (37) Load capacity.
- (38) Tyre rating (the assessed load per tyre which is recommended by the tyre manufacturer, or according to the Australian Standard Tyre and Rim Manual, for the particular size and ply of tyre).
- (39) Whether a non-standard engine is fitted (numeric codes are used. For example, a Holden vehicle fitted with a Ford engine would show a Ford vehicle make code in this field. Special numeric codes are used for 'engine only' makes, e.g. Cummins, Perkins, etc.).
- (40) GVML (gross vehicle mass limit: the total mass, including the mass of the vehicle, to be carried by the axles of the vehicle, in accordance with the vehicle manufacturer's recommendations).

Record 1.501 (Sheet 4)

- (41) GCML (gross combination mass limit: the total mass, including the mass of the vehicle, to be carried on the axles of the vehicle, and on the axles of the vehicle drawn by it, in accordance with the vehicle manufacturer's recommendations).
- (42) Buses: due date for next bus inspection.
- (43) Buses: number of passengers that may be carried.
- (44) Buses: zone code (for buses authorised to operate only in certain geographic regions).

Data for trailers:

- (45) Load capacity.
- (46) Tyre rating (as per item (38) above).
- (47) GVML (as per Item (40) above).

(B) Computer Records: 'History File'

Contains particulars of vehicles whose registration has not been renewed for a period between 12 and 24 months. Data contained in this file are identical to that of the 'Current File'.

(C) Micro-Fiche Records: Cancelled Registrations

These records contain particulars of vehicles whose registration has not been renewed for more than 24 months. Data contained are identical to that of the 'History File'.

(D) Internal Reports

A number of internal reports, in the form of computer printouts, are prepared annually, and in some cases weekly or monthly.

Annual reports (as at July 1):

- (1) Report R1: Total number of vehicles on file, by currency (currently registered, permits only - full data not yet recorded, expired or cancelled), by class (motor vehicles, motor cycles, trailers, traders' plates).
- (2) Report R2: Number of vehicles on file, by registration fee rebate type (no rebate, primary producer, outer area, tractor, ex-service-man, prospector, interstate transport, separate unit trailer, disabled person, pensioner). Note: separate unit trailers: where an Owner has a prime mover and uses a variety of trailers, he can register the prime mover at a mass which includes the mass of the heaviest trailer, and register all the other rear portions separately at no fee.
- (3) Report R3: Number of vehicles on file, by type of exemption from stamp duty on third party insurance (no exemption, bus, pensioner, disabled person, vehicle owned by a municipal council with ordinary registration, vehicle Owned by government or statutory authority).
- (4) Report R4: Number of vehicles exempted from registration fees, by type (e.g. fire brigade, ambulance, civil defence, pest plant control, etc.).
- (5) Report R5: Number of vehicles on file by postcode of Owner's address, by type of vehicle (cars, station wagons, utilities, panel Vans, trucks, other commercial vehicles, buses, tractors, motor cycles, caravans, other trailers).

Record 1.501 (Sheet 5)

- (6) Report R6: Number of vehicles on file, by postcode categories outside South Australia: 2000-2999 (NSW and ACT), 3000-3999 (Victoria), 4000-4999 (Queensland), 6000-6999 (Western Australia), 7000-7999 (Tasmania). Vehicles owned by the State Government are assigned postcode 0000.
- (7) Report R7: Number of vehicles on file, by year when first registered (in 5 year groups from 1905-1909 to 1940-1944, annually thereafter, by type of vehicle (cars and station wagons, other vehicles, trailers).
- (8) Report R8: Number of vehicles on file, by registration expiry date (showing separate data for each day of the year, and monthly totals).
- (9) Report R9: Number of vehicles on file, by colour, by type (motor vehicles, trailers). Also shown in this report is the number of vehicles by fee code (light commercial, heavy commercial, auto cycles and motor cycles 50 kg or less, machine on wheels, all other vehicles), and number of vehicles by fuel type (petrol, diesel, electricity, steam, gas, kerosene).
- (10) Report R10: Number of vehicles on file, by number plate type (alphabetic, numeric), by vehicle type (motor vehicles, motor cycles, trailers, traders' plates). Also shown in this report is the number of government owned vehicles by renewal code (continuous registration, permit not completed, no renewal to be sent, record frozen, vehicle reported stolen, new registration permit, registration renewal permit, 28 day registration). In the same report, there is also a listing of the number of vehicles on file, by type of tyres fitted (pneumatic, metal, solid rubber).
- (11) Report R11: Number of vehicles on file, by type of any additional equipment fitted (e.g. twin steer axle, pusher axle, lazy axle, etc.), by type of vehicle (motor vehicles, trailers). This report also indicates the number of semi-trailers, and the number of left hand drive vehicles. Up to two types of additional equipment per vehicle are recorded, and the report shows the number of vehicles fitted with none, one and two types of additional equipment fitted.
- (12) Report R12: Number of motor cycles on file, by engine capacity (auto cycles 0-50, 51-100; other cycles 0-100, 101-200, ... 1201-1300 cubic cm) .
- (13) Report R13: Number of motor vehicles (other than motor cycles), by mass (0-50; 51-100; ... in 50 kg increments to 8,000 kg; over 8,000 kg) .
- (14) Report R14: Same as Report R13, but for trailers.
- (15) Report R15: Number of vehicles on file (excluding State Government owned vehicles), by third party insurance class category (38 categories).
- (16) Report R16: Number of vehicles on file, owned by the State Government, by type of vehicle (23 categories).
- (17) Report R17: Number of vehicles currently registered, according to vehicle type categories supplied to the Australian Bureau of Statistics (13 categories for articulated vehicles, and 90 categories for other vehicles).

Record 1.501 (Sheet 6)

- (18) Report R18: Number of vehicles currently registered, according to vehicle type categories supplied to the Australian Bureau of Statistics (in 2 groupings: cars and station wagons, other vehicles), by postcode of owner's address.

Weekly reports:

- (19) Report R19: Number of vehicles currently registered, by type of vehicle (same categories as for Item (17) above). Also shown are the number of common expiry dates, the number of taxis and hire cars in the Adelaide metropolitan area, the number of interstate haulier vehicles, the number of vehicles carrying traders' plates (general., limited), the number of heavy vehicles (in 2 load capacity categories: 4,060-8,129 and 8,130 kg or over), and the number of vehicles in certain postcode groupings (5000-5199, 5200-5299, ... 5600-5799, others within South Australia).

Monthly reports :

These are manually prepared accumulations of computer generated daily statistics.

- (20) Monthly statistics of motor registrations: number of vehicles on register on the last update day of the month, which is always a Monday, and the corresponding day of the previous month. Also shown is the number of vehicles registered during the month, by vehicle type (cars, station wagons, utilities, panel vans, trucks, other commercial vehicles, buses, tractors, motor cycles, caravans, other trailers).
- (21) Analysis of vehicles registered during the month: number of new vehicles, by make (e.g. Ford, Holden, Fiat, etc.), by vehicle type (cars, station wagons, commercial vehicles, tractors, motor cycles, trailers). Also shown are the number of secondhand vehicles requiring new registration because of change of ownership, and the number of registrations of secondhand vehicles transferred (including transfers to and from dealers).

(E) Annual Report of the Motor Registration Division

- (1) Monthly average number of new vehicles registered during the year, and number of vehicles on register at June 30 for the last two years, by type of vehicle (cars, station wagons, utilities, panel vans, trucks, other commercial vehicles, buses, tractors, motor cycles, caravans, trailers).
- (2) Monthly average number of secondhand vehicles registered, registrations cancelled, and registrations transferred to a new owner during the year.
- (3) Number of permits granted (in lieu of registration) during the year, by type of permit (e.g. short-term permits for 3 days or less, long-term permits for 6 or 12 months).

Record 1.502 VEHICLES ON REGISTER - South Australia

Metropolitan Taxi-Cab Board, Adelaide

1. Source
Collector and Distributor: Metropolitan Taxi-Cab Board,
50 Melbourne Street, North Adelaide, SA 5006.
2. Periodicity of Availability
Annual.
3. Region of Availability
Adelaide metropolitan area.
4. Published Information
Annual Report of the Metropolitan Taxi-Cab Board of South Australia.
5. Supplementary Information
Internal documentation and working papers.
6. Limitations
The actual number of taxi-cab drivers' licences in force tends to be somewhat above the number shown in the annual report, as a proportion of licence renewal applications are normally received late.
7. Description of Data Available
 - (A) Annual Report of the Metropolitan Taxi-Cab Board
 - (1) Number of taxi-cab licences in force at the end of June, by type of licence (white plates, green plates, hire cars, funeral cars), for the last 5 years.
 - (2) Number of licensed taxi-cab drivers (persons holding a driver's licence which permits them to drive a taxi-cab) at the end of June, for the last 5 years.
 - (B) Internal Records
 - (1) Estimated total number of passengers carried during the year.
 - (2) Estimated number of passengers per journey.
 - (3) Estimated average length of passenger journey.
 - (4) Estimated composition of taxi-cab fleet, by vehicle make and type of fuel used.
 - (5) Estimated proportion of taxi-cabs fuelled by LPG.
 - (6) Estimated annual petrol consumption for a typical taxi-cab.

Record 1.503 VEHICLES ON REGISTER - South Australia

Work Report of the Road Traffic Board

1. Source

Collector and Distributor: Road Traffic Board,
33 Warwick Street, Walkerville, SA 5081.

2. Periodicity of Availability

Annual.

3. Region of Availability

South Australia.

4. Published Information

Work Report of the Road Traffic Board of South Australia.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Not known.

7. Description of Data Available

- (1) Number of ~~motor~~ vehicles for which exemptions from Australian Design Rules were approved.
- (2) Number of motor vehicles exempted from regulations under the South Australian Road Traffic Act relating to vehicle modifications.
- (3) Number of left hand drive vehicles approved.
- (4) Number of vehicle modifications approved, by type of approval (in principle/initial approval, certificate of dispensation/final approval).
- (5) Number of permits issued for over-dimensioned vehicles, and for over-weight vehicles, by period of permitted operation (less than 1 month, 1 to 3, 3 to 12 months), by type of applicant (e.g. large carrying companies, State Government authorities, etc.).
- (6) Graph showing the trend in over-dimensioned and over-weight vehicle permits issued each year, for the last 9 years.

Record 1.601 VEHICLES ON REGISTER - Western AustraliaRoad Traffic Authority, Perth1. Source

Collector and Distributor: Road Traffic Authority,
22 Mount Street, Perth, WA 6000.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. Some information is published each year by the Road Traffic Authority in its Annual Report.

3. Region of Availability

Western Australia.

4. Published Information

(1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State Motor Registration Authorities. (Refer Record 1.101).

(2) Annual Report of the Road Traffic Authority.

5. Supplementary Information

It would be possible to generate special-purpose computer printouts, sharing summaries of various sub-sets of motor registration data on file. This would normally require writing new computer programs. Whilst the Authority would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current work load of the computer programming resources available.

Some information on taxis, buses and goods carrying vehicles is contained in the Annual Report of the Transport Commission. (Refer Record 1.602).

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into the State by short-term overseas visitors.

At present, the Road Traffic Authority is using the State Treasury computer facilities, and any program modifications or additions would normally be carried out by the State Treasury ADP Section. The Authority intends to acquire its own computer facility, the planned introduction date being 1982.

The main computer record, the 'Current File', contains data on all current registrations, and registrations which have not been renewed for up to 15 months.

Vehicles whose registration has not been renewed for between 3 and 15 months are regarded as 'semi-dead' and data on these can be retrieved as a separate group from the 'Current File'.

Registrations not renewed for more than 15 months are transferred from the 'Current File' to the 'History File'. The 'History File' was created in 1968.

Record 1.601 (Sheet 2)

The hard copy of all registration application forms, both for initial registration and for renewals, are kept without time limit. Records of this type are available at least since the 1920's.

In some regions of WA, Local Government Authorities act as agents for the Road Traffic Authority. The information collected by these agents is the same as that collected by the Road Traffic Authority: however, the quality of the information supplied by the agents is not always of a high standard; at times data may be described only very vaguely or omitted altogether. At present, about 10% of all vehicle registrations are effected by agents. In the main, these cover vehicles used by farmers. (Some 46% of all tractors, but only 7% of all motor cars in the State are registered by agents).

7. Description of Data Available

Details of vehicle registrations are contained in two separate computer files: the 'Current File', and 'History File'.

(A) Computer Records: 'Current File'

This file is also referred to as the 'Live File'.

- (1) Vehicle registration number ('plate number').
- (2) Vehicle class (A normal use; B restricted use for certain vehicles which do not comply with prescribed standards; C special use, for example vehicles used by driving instructors).
- (3) Name and address of registered owner.
- (4) Locality code (designating the geographic region: e.g. Southern/Central/Northern Agricultural/Eastern Goldfields etc.) . This item is of historical significance only, and is no longer used.
- (5) Year of manufacture.
- (6) Vehicle make and model (e.g. Holden Monaro).
- (7) Body code (type of body construction, designated by a code number. About 180 different code numbers are used).
- (8) Fee type code. The registration fee and third party insurance premium are assessed according to three aspects: vehicle weight, horsepower rating, and vehicle type. For this purpose, 17 types of vehicles are defined, such as motor car - private, motor car - taxi, caravan, mobile crane, etc.
- (9) Engine number.
- (10) Chassis number.
- (11) Horsepower rating.
- (12) Type of engine fuel used (petrol, diesel, kerosene, electricity, gas, other) .
- (13) Number of axles.
- (14) Number of cylinders.
- (15) Vehicle colour (provision is made for two colours).
- (16) Rate of stamp duty payable.

Record 1.601 (Sheet 3)

- (17) Market value of vehicle (estimated by owner at the time of lodging his application for registration).
- (18) Tare weight.
- (19) Aggregate weight (weight of vehicle plus its maximum permissible load, recorded for goods carrying vehicles).
- (20) GCM (gross combination mass of prime mover and trailer or trailers in the case of articulated vehicles, including the maximum permissible load of the combination).
- (21) Third party insurance category. (Insurance class code).
- (22) Registration expiry date.
- (23) Previous registration number.
- (24) Previous expiry date.
- (25) Names and addresses of the three most recent owners of the vehicle.
- (26) Section 19 type and fee rate applicable (for vehicles subject to a concessional registration fee, which applies to fire trucks, ambulances, etc.).
- (27) Registration period (owner has a choice of 6 or 12 months).
- (28) Condition. This item is not used at present, but space for it is provided both in the application form and in the computer records. It may be used in the future to stipulate any special conditions pertaining to the registration.

(B) Computer Records: 'History File'

Contains particulars of vehicles whose registration has not been renewed for more than 15 months. Data contained in this file is identical to that of the 'Current File'.

(C) Masterfile Printout

A summary computer printout report is produced each time the 'Current File' is updated, which is about twice a week. The report sets out the number of 'live' and 'dead' vehicles ('live' are vehicles currently registered or those whose registration has expired by up to 3 months; 'dead' are vehicles whose registration has expired by between 3 and 15 months), shown by vehicle category (17 fee type codes: motor car - private, motor car - taxi, motor wagon, motor omnibus, etc.), and whether the registration was effected by the Road Traffic Authority (designated 'State'), or by agents.

(D) Initial Application for Registration

The hard copy of the application form for initial registration contains the same information as that in the 'Current File'.

(E) Annual Report of the Road Traffic Authority

- (1) Total number of vehicles on register as at June 30, for the last two years.
- (2) Total number of new vehicles registered during the year, and during the preceding year.

Record 1.601 (Sheet 4)

- (3) A statistical summary of total number of vehicles (excluding tractors, caravans and other trailers) for the last 12 years, showing:
- (a) number of new vehicles registered during the calendar year,
 - (b) number of vehicles on register as at December 31, and
 - (c) number of vehicles on register per 1,000 of population as at December 31.

Data for (a) and (b) shown separately for Perth Statistical Division and rest of State.

- (4) Number of vehicles on register as at June 30 by type of vehicle (*motor cars private, motor cars taxi, motor wagons, motor omnibuses, motor cycles, trailers, semi-trailers, caravans, tractors and others*), by registering authority (Road Traffic Authority, Shires with delegated authority), for the last two years.
- (5) Number of factory new vehicles registered during the year ending June 30 by type of vehicle (same categories as ~~for~~ Item (4) above), by registering authority (Road Traffic Authority, Shires with delegated authority), for the last two years.

Record 1.602 VEHICLES ON REGISTER - Western Australia

Annual Report of the Transport Commission

1. Source
Collector and Distributor: Transport Commission,
136-138 Stirling Highway, Nedlands, WA 6009.
2. Periodicity of Availability
Annual.
3. Region of Availability
Western Australia.
4. Published Information
Annual Report of the Transport Commission.
5. Supplementary Information
The Taxi Control Board, which is Part of the Transport Commission, maintains data on the number of taxi drivers registered as at June 30 by type of driver (full time, part time, restricted part time).
6. Limitations
Vehicles owned by the Commonwealth Government are not included.
7. Description of Data Available
 - (1) Number of licensed commercial goods vehicles: total number of vehicles for the last five years; detailed data for the current year, shewing the number of vehicles licensed to carry specific types of goods (e.g. aerated waters and cordials, bitumen, sawn timber, etc.), and the route and area of operation specified in the permit (e.g. mainly within 80 km radius of the GPO Perth, from sawmills to metropolitan area, etc.).
 - (2) Number of temporary licences issued for commercial goods carrying vehicles (for varying periods of time less than twelve months), for the last five years.
 - (3) Data on goods carrying operators eligible for State subsidy payments, showing their area of operation, frequency of service (number of trips per week), and the average distance travelled (round trip).
 - (4) Estimated number of trips made by pensioners on country town bus services. Separate data shown for six country towns: Albany, Busselton, Bunbury, Mandurah, Geraldton, Kalgoorlie.
 - (5) Number of omnibus licences, shewing the number of vehicles licensed according to area and type of operation (e.g. Albany, regular town service and local tours; Norseman, regular services to the mines, etc.).
 - (6) Number of taxi-car licences, by type of licence: Perth metropolitan area licence, restricted area licence (limited to operate within specified boundaries), and private taxi-car licence.

Record 1.701 VEHICLES ON REGISTER - Tasmania

Motor Registry, Hobart

1. Source

collector and Distributor: Motor Registration Section,
The Transport Commission, 1 Collins Street, Hobart, Tas. 7000.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. Some information is published each year by The Transport Commission in its Annual Report.

3. Region of Availability

Tasmania.

4. Published Information

- (1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State Motor Registration Authorities. (Refer Record 1.101).
- (2) Annual Report of the Transport Commission.

5. supplementary Information

It would be possible to generate special-purpose computer printouts, showing summaries of various sub-sets of motor registration data on file. This may require development of new computer programs. Whilst the Registry would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current workload of the computer programming resources available.

6. Limitations

The following types of vehicles are not included in these records:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into the State by short-term overseas visitors.

The computer currently used for motor registrations is an IBM 1440 which will be replaced by a new installation during 1980. A new data storage and retrieval system is currently being developed, which will be much more comprehensive and flexible than the system used at present.

The existing computer-based system has been in operation since 1962. The 'Current' computer file contains data on all vehicle registrations currently in force, as well as those not renewed up to three months after expiry. Data concerning registrations not renewed for more than three months is removed from the 'Current File' and discarded. A computer file of historical data does not exist.

Hard copies of the initial registration certificates are kept indefinitely, and details of all renewal payments are recorded thereon. These records date back several decades, but exclude those vehicles whose registration was cancelled prior to 1970 (the year when the present type of number plate was introduced).

Hard copies of renewal certificates are discarded at the end of their one year currency.

Record 1.701 (Sheet 2)

7. Description of Data Available

The following information is available: computer records, the hard copies of the initial registration certificates, monthly and annual reports referred to as 'Summary of Transactions', a card index masterfile, and the Annual Report of The Transport Commission.

(A) Computer Records: 'Current File'

The information stored varies to some extent according to the three main types of vehicles: motor cycles, other types of motor vehicles and trailers.

Common data for all vehicle types:

- (1) Name, address and postcode number of registered Owner.
- (2) Municipality code number of address of registered owner.
- (3) Expiry date of registration.
- (4) Vehicle registration number.
- (5) Type of vehicle (description of its construction or function).
- (6) Vehicle colour.
- (7) Vehicle make (e.g. Ford, Holden, etc.).
- (8) Whether the vehicle has been previously registered.
- (9) Exemption code (for vehicles which need not be registered, e.g. ambulances, fire brigade vehicles, agricultural vehicles, etc.).
- (10) Third party insurance code.
- (11) Tax code (passenger/commercial; the latter in three mass categories).

Data for motor vehicles other than motor cycles:

- (12) Year of manufacture.
- (13) Engine number.
- (14) Engine horsepower rating.
- (15) Motive power (type of fuel used: petrol/diesel/other).
- (16) Unladen or tare mass.
- (17) GVM (gross vehicle mass: total mass of vehicle including its maximum permissible load).
- (18) GCM (gross combination mass: total mass of vehicle and trailer combination, including the maximum permissible load that can be carried).

Data for motor cycles:

- (19) Year of manufacture.
- (20) Engine number.
- (21) Engine capacity.

Data for trailers:

- (22) Unladen or tare mass.

Record 1.701 (Sheet 3)

(B) Initial Registration Certificates

The hard copy of the application form for initial registration (which is also used as the initial registration certificate) includes all information contained in the 'Current' computer file, as well as the following additional information:

Common data for all vehicle types:

- (1) If the vehicle has been previously registered, name of previous owner, and previous registration number.
- (2) Whether number plates have been returned and, if so, where.
- (3) Market value of vehicle.
- (4) Exemption certificate number, if any.
- (5) Amount of stamp duty.

Data for motor vehicles other than motor cycles:

- (6) Model name of vehicle.
- (7) Chassis number.
- (8) Make of engine.
- (9) Number and bore of cylinders.

Data for motor cycles:

- (10) Model name of vehicle.
- (11) Chassis number.

Data for trailers:

- (12) Number of wheels.
- (13) Number of tyres.
- (14) Number of axles.
- (15) Composition of tyres (e.g. pneumatic, solid rubber, etc.).
- (16) Maker's identification number.
- (17) Length and width of trailer (metres).

(C) Summary of Transactions

Monthly and annual reports are prepared in the form of computer print-outs, showing the number of transactions completed during the period, separately for each municipality code. Each report contains:

- (1) The number of registrations, including initial registrations, according to main vehicle type groupings (cars, station sedans, ambulances, omnibuses, trucks, utilities, panel vans, tractors, trailers, motor cycles, farm tractors).
- (2) The number of vehicles for which ownership was transferred during the period, separately for all types of motor vehicles, and for trailers.

(D) Card Index Masterfile

A manual record system, consisting of a card index file, both for motor registrations and for drivers' licences, is maintained. The index cards are filed alphabetically by name of vehicle owner or licence holder.

Record 1.701 (Sheet 4)

Vehicle Owners other than persons (e.g. companies, public authorities, trusts, etc.) are not included in this file. Each index card contains:

- (1) Name and date of birth of vehicle owner or holder of driver's licence.
- (2) A historical record of the registration numbers of all vehicles that have been registered in that person's name.
- (3) A historical record of the registration numbers of all vehicles that have been cancelled in that person's name.

Each index card also contains driver's licence information in relation to that person. (Refer Record 4.701).

(E) Annual Report of The Transport Commission

- (1) Data for the last 15 years, showing the number of registrations effected during the year (both new registrations and renewals), by type of vehicle (cars, lorries, utilities and panel vans, motor cycles, trailers, trade plates). Also shown is the number of registrations per 1,000 of population.
- (2) Data for the last 15 years, showing the number of new vehicles registered during the year, by type of vehicle (cars, lorries and utilities, motor cycles).
- (3) Number of vehicles registered during the year (both new registrations and renewals), by municipality of owner's address, by type of vehicle (cars, station sedans, trucks, utilities, panel vans, trailers, motor cycles).
- (4) Number of vehicles for which the ownership was transferred during the year, separately for trailers and for other vehicles.
- (5) Number of vehicles for which a public vehicle licence was issued during the year, by type of licence (cart, carrier, ancillary, cab, hire and drive, omnibus, hire car, coach, temporary public vehicle). Also shown are the number of ownership transfers of public vehicles and ancillary vehicles. Data shown are for the last 2 years.
- (6) Number of 'Out of Area' permits issued during the year for goods carrying vehicles, by type of goods (e.g. machinery, agricultural products, etc.), and for passenger transport vehicles by type of permit (passenger, hire car).

Record 1.801 VEHICLES ON REGISTER - Northern Territory

Motor Vehicle Registry, Darwin

1. Source

Collector and Distributor: Motor Vehicle Registry,
Department of Transport and Works, PO Box 530,
Darwin, NT 5794.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. Some information is published each year by the Department of Transport and Works in its Annual Report.

3. Region of Availability

Northern Territory.

4. Published Information

- (1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State and Territory Motor Registration Authorities. (Refer Record 1.101).
- (2) Annual Report of the Department of Transport and Works.

5. Supplementary Information

It would be possible to generate special-purpose computer printouts, showing summaries of various sub-sets of motor registration data on file. This may require development of new computer programs. Whilst the Registry would consider favourably any requests from appropriate authorities for additional data of this kind, such requests would have to be examined against other priorities and the current workload of the computer programming resources available.

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into the Territory by short-term overseas visitors.

The Northern Territory was administered by the Commonwealth Government until it attained self-governing status on July 1, 1978. At that time, the Motor Vehicle Registry became part of the newly created Department of Transport and Works.

Computerised procedures were introduced in January 1979. Both the Darwin head office, and the Alice Springs branch are connected to the same on-line system. The Registry is using the Northern Territory Government ADP Centre, and any program modifications or additions would normally be carried out by the Centre.

Residents in areas other than Darwin and Alice Springs will continue to apply for vehicle registrations and pay their fees to the nearest police station or a Registry branch office (located at Katherine, Nhulunby, and Tennant Creek).

The main computer record, the 'MVR File', contains details of all transactions since 1979, and in a proportion of cases since 1978. It is intended to add all future transactions to the same file. For any given vehicle, each new transaction results in the addition of another 'segment' to that vehicle record.

Record 1.801 (Sheet 2)

The present system also includes a facility to search vehicle data by engine number, thus replacing the previously maintained manual engine card index file.

The hard copy of all registration application forms, both for initial registration and for renewals, are kept without time limit. Records of this type are available at least since the 1920's. It is planned to discard some of the older records.

Until 1979, particulars on date of birth and driver's licence number of the vehicle's registered owner were collected, but these items were not included in the computer data bank.

(A) Computer Records: 'MVRR File'

- (1) Vehicle registration number.
- (2) Name and address of registered owner.
- (3) Number of Owners.
- (4) Type of vehicle (car, lorry, tractor, motor cycle, bus, trailer, hire car, vehicle registered by a dealer).
- (5) Body code (type of body construction, designated by a code number. 38 different code numbers are used).
- (6) Year of manufacture.
- (7) Whether the vehicle is brand new or used.
- (8) Vehicle make and model (e.g. Nissan Patrol).
- (9) Description of body type (e.g. utility).
- (10) Vehicle colour (provision is made for two colours) .
- (11) Tare weight.
- (12) Due date for next vehicle inspection.
- (13) Engine number.
- (14) Type of engine fuel used (petrol, diesel, electric, gas).
- (15) Engine power: expressed either as horsepower, or kilowatt, or engine displacement (cubic cm, cubic inches, or litres).
- (16) Trailers: serial number, length and width.
- (17) Whether registration is for 6 or 12 months.
- (18) Registration status (e.g. new registration, renewal, cancellation, half-registration, plate change, temporary permit, transfer Of ownership, etc) .
- (19) Registration expiry date.
- (20) Registration issue date (date when the vehicle was registered in the Northern Territory for the first time).
- (21) Special registration type (any restrictions or conditions placed on the use of the vehicle; e.g. to be used in daylight only).
- (22) Whether a statutory declaration has been lodged in cases where a number plate or registration papers have been reported lost.

Record 1.801 (Sheet 3)

- (23) Whether the vehicle is under hire purchase. (If so, the owner is required to lodge a 'Notice of Hire Purchase agreement' signed by the hire purchase company).
- (24) Label action (whether a new or a replacement registration label has been issued).
- (25) Registration label number.
- (26) Whether the vehicle has been previously registered in a State other than the Northern Territory and, if so, in which State, previous registration number, and particulars of whether and where the previous number plates have been surrendered).
- (27) For initial registrations: name and address of previous owner, and date of purchase.
- (28) Fee type code (e.g. PP personalised plate, WL replacement of wind-screen registration label, TC replacement of registration papers issued, etc.).
- (29) Registration fee.
- (30) Stamp duty.
- (31) Concession (e.g. pensioners, vehicles licensed for the carriage of goods, taxis, private hire cars, vehicles licensed to carry workmen, tourist buses, trailers exceeding 9999 kg tare weight, etc.).
- (32) Third party insurance expiry date.
- (33) Third party insurance company name and code number.
- (34) Third party insurance category and premium.

(B) Application for Registration Forms

The hard copy of the application form, which is used both for initial registrations and for renewals, contains no information additional to that contained in the 'Master File'. Prior to the introduction of computer records, the application form also contained the following data:

- (1) Driver's licence number of registered owner.
- (2) Date of birth of registered Owner.
- (3) Title of registered Owner (Mr., Mrs., Miss, Ms).

(C) Annual Report of the Department of Transport and Works

- (1) Number of new vehicles registered during the year, by type (private vehicles, trucks, taxis, buses, motor cycles, caravans, trailers, vehicles registered by dealers, plant and equipment, government vehicles), by area (Darwin, Tennant Creek, Katherine, Alice Springs).
- (2) Same as Item (1), but for vehicle registration renewals.
- (3) Number of vehicle permits and licences issued during the year, by type (permits under Control of Roads Act, carriage of goods licences, special licences), by area (Darwin, Tennant Creek, Katherine, Alice Springs).

Record 1.901 VEHICLES ON REGISTER - Australian Capital Territory

ACT Motor Vehicle Registry, Canberra

1. Source

Collector and Distributor: ACT Motor Vehicle Registry,
Department of the Capital Territory, Challis Street,
Dickson, ACT 2602.

2. Periodicity of Availability

The data available are part of an internal records system which is continually updated. Some information is published each year by the Department of the Capital Territory in its *Annual Report*.

3. Region of Availability

Australian Capital Territory.

4. Published Information

- (1) The Australian Bureau of Statistics publishes detailed information on motor registrations, based on data supplied by the State and Territory Motor Registration Authorities. (Refer Record 1.101).
- (2) Annual Report of the Department of the Capital Territory.

5. Supplementary Information

Retrieval of specific information from existing computer files is at present possible by using a special package 'REPORT' which, however, is cumbersome and involves excessive computer running time. The Department's computer section is currently developing an alternative, more efficient, package for this purpose.

The Department has indicated that it would consider favourably any requests from appropriate authorities for special-purpose computer printouts; such requests, however, would have to be examined against other priorities and, if additional programming is required, would depend on the current work load of the Department's computer programming resources.

6. Limitations

The following types of vehicles are not included:

- Vehicles owned by the Commonwealth Government.
- Vehicles exempt from registration (e.g. roadmaking plant).
- Vehicles brought into the Territory by short-term overseas visitors.

The present on-line computer system contains data on all motor registration transactions since 1971.

7. Description of Data Available

Details of vehicle registrations are contained in three separate computer files on the on-line system: the 'Vehicle Details File', 'Vehicle History File', and 'Name and Address File'.

(A) Computer Records: 'Vehicle Details File'

- (1) Vehicle registration number.
- (2) Engine number.
- (3) Chassis number.
- (4) Make of vehicle (e.g. Ford, Holden, etc.).

Record 1.901 (Sheet 2)

- (5) Body code (type of body construction, designated by a code number. 29 different code numbers are used).
- (6) Vehicle model (e.g. Monaro GTS, Gemini, etc). Data on this item is incomplete.
- (7) Vehicle colour (provision is made for two colours).
- (8) Year of manufacture.
- (9) Type of engine fuel used (petrol, diesel, steam, gas, electricity, other).
- (10) Engine capacity (cubic cm).
- (11) Tare weight (not used at present).
- (12) Number of cylinders.
- (13) Trailers: type of use (private, commercial, trailer not used).
- (14) Type of registration fee.
- (15) Motor cycles: whether a side car is fitted.
- (16) Whether the vehicle has left hand drive.
- (17) Trucks: whether the vehicle is rigid or articulated.
- (18) Whether the vehicle has automatic transmission.
- (19) Condition (any exemptions from normal registration requirements).
- (20) Third party insurance category.
- (21) Gross vehicle mass (not used at present).
- (22) Vehicle registration status (currently registered, registration cancelled, registration expired, etc.).
- (23) Name of third party insurance company.
- (24) Registration starting date.
- (25) Registration expiry date.
- (26) Third party insurance expiry date.

For some of the items in the 'Vehicle Details File', information dates back only as far as 1978 (left hand drive, articulated or rigid trucks, motor cycle side car, vehicle model, second colour description, number of cylinders, automatic transmission, exemption from normal registration requirements). It is intended to use a few additional items in the near future: gross vehicle mass, third party insurance premium, starting date of third party insurance cover.

(B) Computer Records: 'Vehicle History File'

- (1) Whether the registration was an original registration (and if so, whether it was a new or used vehicle).
- (2) Whether the registration was a renewal.
- (3) Whether the registration pertains to a transfer of ownership.
- (4) Whether the registration was cancelled.
- (5) Whether a temporary licence was issued in lieu of an original registration.

Record 1.901 (Sheet 3)

- (6) Whether a temporary licence was issued in lieu of a registration renewal.
- (7) Whether a remake of the registration number plate has been requested.
- (8) Whether the vehicle registration number has been changed.
- (9) Whether a duplicate registration label was issued.
- (10) Description of changes of any details pertaining to the vehicle.
- (11) Description of any special conditions pertaining to the registration of this vehicle.
- (12) Whether third party insurance premium has been prepaid or paid.
- (13) Date of Transaction.

(C) Computer Records: 'Name and Address File'

Name and address of registered owner.

(D) Annual Report of the Department of the Capital Territory

- (1) Number of vehicles renewed during the year.
- (2) Number of vehicles registered for the first time during the year.
- (3) Number of registrations cancelled during the year.
- (4) Number of vehicles on register at June 30, and percentage increase over the corresponding figure for the previous year.

SECTION 2VEHICLES IN USEAustralia

- 2.101 Survey of Motor Vehicle Usage, 1979
- 2.102 Survey of Motor Vehicle Usage; 1976
- 2.103 Survey of Motor Vehicle Usage, 1971
- 2.104 Survey of Motor Vehicle Usage, 1963
- 2.105 Private Bus and Ferry Operators in Australia
- 2.106 National Travel Survey
- 2.107 Journey to Work: Census Data and Sample Surveys
- 2.108 A Study of the Economics of Road Vehicle Limits
- 2.109 Seat Belt Surveys: Office of Road Safety
- 2.110 Submissions to the Committee on Road Safety
- 2.111 Public Transport Statistics
- 2.112 Australian Department of National Development and Energy
- 2.113 Australian Road Travel Information (R.H. BURKE)
- 2.114 Australian Travel Research Conference

New South Wales

- 2.201 Sydney Bus Services
- 2.202 Vehicle Usage Surveys: NRMA
- 2.203 Seat Belt Surveys: NRMA
- 2.204 Seat Belt Surveys: TARU
- 2.205 Journey to Work: Planning and Environment Commission
- 2.206 Vehicle Fleet Data: Australia Post

Victoria

- 2.301 Melbourne Bus and Tram Services
- 2.302 Vehicle Usage Surveys: RACV
- 2.303 Vehicle Usage Surveys: ARRB
- 2.304 Seat Belt surveys: RoSTA
- 2.305 Journey to Work Patterns: Melbourne 1961-71 (C.A. MAHER and K. O'CONNOR)
- 2.306 Urban Passenger Travel - The Role of the Electric Car (J.W. GRAVES)

Queensland

- 2.401 Brisbane Bus Services
- 2.402 Characteristics of Road Travel in Queensland 1973 (K. LEITCH, G. MIDDLETON and L. MUDGE)

South Australia

- 2.501 Adelaide Bus and Tram Services
- 2.502 Metropolitan Adelaide Public Transport Patronage Study
- 2.503 Seat Belt Surveys: Road Traffic Board

Western Australia

- 2.601 Perth Bus Services

Tasmania

- 2.701 Hobart Bus Services
- 2.702 Vehicle Usage Surveys: The Transport Commission
- 2.703 Seat Belt Surveys: The Transport Commission
- 2.704 Visitor Survey - Tasmania
- 2.705 Growth and Development of Tasmania's Energy System (M.J. HARTLEY, R. JONES and R.L. BADCOCK)

SECTION 2, VEHICLES IN USE, continued

Northern Territory

2.801 Darwin Bus Services

Australian Capital Territory

2.901 Canberra Bus Services

Data on vehicles in use were derived from a variety of sources: the Australian Bureau of Statistics (vehicle usage surveys, journey to work data, public transport statistics), the Office of Road Safety (seat belt surveys), motorists' associations (vehicle usage and seat belt surveys), public transport authorities, and a number of other organisations which have conducted special-purpose surveys that included ~~SOME~~ vehicle usage information. Data on vehicle kilometres travelled and fuel consumption are also included in this Section.

Record 2.101 VEHICLES IN USE - Australia

survey of Motor Vehicle Usage, 1979

1. Source
Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.
2. Periodicity of Availability
Irregular. Other similar surveys were conducted in 1976, 1971 and 1963
(refer Records 2.102. 2.103, 2.104).
3. Region of Availability
Australia.
4. Published Information
None available at time of writing. It is understood that publications
will be produced along the lines of those compiled from the 1976 Survey
results.
5. Supplementary Information
None available at time of writing.
6. Limitations
Not known at time of writing.

Record 2.102 VEHICLES IN USE - Australia

Survey of Motor Vehicle Usage, 1976

1. Source

Collector and Distributor: Australian Bureau of Statistics,
Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. Other similar surveys were conducted in 1979, 1971 and 1963 (refer Records 2.101, 2.103, 2.104). A survey of bus fleet operations was conducted separately in 1976 and 1971, and the information is included in the vehicle usage surveys for these years.

3. Region of Availability

Australia.

4. Published Information

ABS Ref.No. 14.4 'Survey of Motor Vehicle Usage (Preliminary), 1976'.
ABS Cat.No. 9208.0 'Survey of Motor Vehicle Usage, 1976'.
9209.0 'Commercial Vehicle Usage, 1976'.
9203.0 'Bus Fleet Operations, 1976'.
9210.0 'Accident Exposure Data, 1976'.

5. Supplementary Information

The Australian Bureau of Statistics has produced microfiche and computer listings for most of the tabulations from the 1976 survey which contain more detail than the publications listed above. Edited data are stored on magnetic tapes held by ABS.

6. Limitations

Excluded from the surveys were defence vehicles and vehicles with consular or diplomatic plates, caravans, trailers, tractors, plant and equipment. A discussion of the sampling method is contained in each bulletin. Vehicles were sampled according to registered body type, and in some cases the returned questionnaire nominated a reported body type which was different to that recorded in the registration record. Hence, the estimated number of vehicles for each body type may differ between the survey population estimates and those of other sources, such as the Census of Motor Vehicles. This problem was most notable in Victoria in 1976. In addition, definitions of some vehicle categories were changed between the 1971 and 1976 Surveys.

7. Description of Data Available

In the tables described below, separate data are available for the following categories:

- Vehicle type (cars and station wagons, utilities and panel vans, rigid trucks, articulated trucks, motor cycles).
- Trip purpose (laden business, paid to and from work, unpaid to and from work, private).
- Area of operation (capital city, provincial Urban, rest of State, interstate).

(A) 14.4 'Survey of Motor Vehicle Usage, 12 Months Ended 30 September 1976 (Preliminary)'

- (1) Table 1: Average annual kilometres by type of vehicle: Australia, twelve months ended 31 December 1963, 30 September 1971, 30 September 1976.

Record 2.102 (Sheet 2)

- (2) Table 2: Total annual kilometres by type of vehicle: Australia, for the same periods as in Table 1.

For the twelve months ended 30 September 1976:

- (3) Table 3: Average annual kilometres, by type of vehicle and purpose: Australia.
- (4) Table 4: Average annual kilometres, by type of vehicle and State of registration: Australia.
- (5) Table 5: Average annual kilometres, by type of vehicle and area of operation: Australia.
- (6) Table 6: Average annual kilometres, by ~~purpose~~: States of registration.
- (7) Table 7: Average annual kilometres, by area of operation: States of registration.
- (8) Table 8: Total annual kilometres, by vehicle type: States of registration.

(B) 9208.0 'Survey of Motor Vehicle Usage, 12 Months Ended 30 September 1976'

- (1) Table 1: Average annual kilometres by type of vehicle: Australia, twelve months ended 31 December 1963, 30 September 1971, 30 September 1976.
- (2) Table 2: Total annual kilometres by type of vehicle: Australia, for the same periods as in Table 1.
- For the twelve months ended 30 September 1976:
- (3) Table 3: Average annual kilometres, by type of vehicle and purpose: Australia.
- (4) Table 4: Average annual kilometres, by type of vehicle and State of registration: Australia.
- (5) Table 5: Average annual kilometres, by type of vehicle and area of operation: Australia.
- (6) Table 6: Average annual kilometres, by purpose: States of registration.
- (7) Table 7: Average annual kilometres, by area of operation: States of registration.
- (8) Table 8: Total annual kilometres, by State of operation: States of registration.
- (9) Table 9: Average annual kilometres, by type of vehicle: States of registration.
- (10) Table 10: Total and average annual kilometres, by area of operation: States of registration.
- (11) Table 11: Total and average annual kilometres, by type of vehicle and area of operation: Australia.
- (12) Table 12: Total and average annual kilometres, by purpose: States of registration.
- (13) Table 13: Total and average annual kilometres, by type of vehicle and purpose: Australia.

Record 2.102 (Sheet 3)

- (14) Table 14: Total and average annual business kilometres, by type of vehicle: States of registration.
- (15) Table 15: Total (utilities, panel vans, trucks) annual laden business kilometres, by type of vehicle and vehicle usage.
- (16) Table 16 to Table 19: Total annual and average tonne kilometres and average tonne kilometres and tonnes carried by type of vehicle (utilities, panel vans and trucks), area of operation and industry served.
- (17) Table 20: Average annual kilometres, by type of vehicle, number of occupants and area of operation (metropolitan and non-metropolitan): Australia.
- (18) Tables 21 and 22: Total and average annual rate of fuel consumption, by type of vehicle and kind of fuel (petrol and diesel/distillate): Australia.
- (19) Table 23: Total number of vehicles (excluding those which recorded zero usage in the Survey period), by type of vehicle: States of registration.

(C) 9209.0 'Survey of Motor Vehicle Usage, Commercial Vehicle Usage
12 Months Ended 30 September 1976'

This publication contains data on total annual business and business laden kilometres, total and average tonne-kilometres, load carried and fuel consumption by type of vehicle, State of registration, industry served, vehicle usage and kind of fuel. Some vehicle type tables contain the number of axles for classification purposes.

(D) 9203.0 'Survey of Bus Fleet Operations, 12 Months Ended 30 June 1976'

- (1) Table 1: Total number of buses by size of fleet, type of fuel: States of registration.
- (2) Table 2: Total number of buses by age of buses: States of registration.
- (3) Table 3: Total and average annual number of kilometres by type of service (route, school, charter, tow and other) and size of fleet: Australia.
- (4) Table 4: Total annual kilometres by size of fleet and State of operation.
- (5) Table 5: Total annual kilometres by area of operation (capital cities, provincial or major urban and other areas) and State of operation.
- (6) Table 6: Total annual kilometres by size of fleet and area of operation (capital cities, provincial or major urban and other areas).
- (7) Table 7: Total passengers carried by type of service (route, school, charter, tow and other) and size of fleet.
- (8) Table 8: Total annual fuel consumption by major use of fleet (route, school, charter, tow and other) and fuel type (petrol and diesel).

Record 2.102 (Sheet 4)

(E) 9210.0 'Survey of Motor Vehicle Usage, Accident Exposure Data,
12 Months Ended 30 September 1976'

- (1) Table 1: Total annual kilometres for cars and station wagons by sex, age, driving experience and marital status of driver: States of registration.
- (2) Table 2: Average annual kilometres for drivers of cars and station wagons by sex, age, driving experience and marital status of driver: States of registration.
- (3) Table 3: Total annual kilometres for cars and station wagons by sex, age, driving experience and marital status of driver: Australia.
- (4) Table 4: Average annual kilometres for drivers of cars and station wagons by sex, age, driving experience and marital status of driver: Australia.
- (5) Table 5: Total annual towing kilometres for cars and station wagons by type of vehicle towed: States of registration.
- (6) Table 6: Total annual occupant kilometres by type of vehicle: States of registration.
- (7) Table 7: Vehicle accidents per million kilometres by type of vehicle: States of registration.
- (8) Table 8: Population, total kilometres, motor vehicles registered, road length: States 30 September 1976.

(F) Supplementary Data

More detailed information on the 1976 Survey is available in the form of computer printouts or microfiche records. Data of this kind may be more useful for purposes of analysis and research than the data contained in the publications described in parts (A) to (E) above.

Record 2.103 VEHICLES IN USE - Australia

Survey of Motor Vehicle Usage, 1971

1. Source

Collector and Distributor: Commonwealth Bureau of Census & Statistics (now Australian Bureau of Statistics), Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. Other similar surveys were conducted in 1979, 1976 and 1963 (refer Records 2.101, 2.102 and 2.104). A survey of bus fleet operations was conducted separately in 1976 and 1971, and the information is included in the vehicle usage surveys for these years.

3. Region of Availability

Australia.

4. Published Information

ABS Ref.No. 14.4 'Survey of Motor Vehicle Usage (Preliminary) 1971'.
 14.18 'BUs Fleet Operations Survey 1971'.
 14.19 'Bus Fleet Operations Survey (Supplementary Release) 1971'.
 - 'Road Traffic Accident Data'.

5. Supplementary Information

Computer listings of tabulations from the 1971 Survey are also available and contain more detail than the publications listed above. Edited data are stored on magnetic tapes held by ABS.

6. Limitations

Excluded from the surveys were defence vehicles and vehicles with consular or diplomatic plates, caravans, trailers, tractors, plant and equipment. A discussion of the sampling method is contained in each bulletin. Vehicles were sampled according to registered body type, and in some cases the returned questionnaire nominated a reported body type which was different to that recorded in the registration record. Hence, the estimated number of vehicles for each body type may differ between the survey population estimates and those of other sources, such as the Census of Motor Vehicles. In addition, definitions of some vehicle categories were changed between the 1971 and 1976 Surveys.

7. Description of Data Available

In the tables described below, separate data are available for the following categories:

- Vehicle type (cars and station wagons, open and closed light commercial type vehicles, rigid trucks, articulated trucks, motorcycles).
- Trip purpose (laden business, unladen business, paid to and from work, unpaid to and from work, private).
- Area of operation (capital city urban, provincial urban, rest of State, interstate).

Record 2.103 (Sheet 2)

(A) 14.4 'Survey of Motor Vehicle Usage, 12 Months Ended 30 September 1971 (Preliminary)'

This was the final publication of the 1971 Survey and is dated September 1973.

- (1) Table 1: Total annual mileage, by purpose and area of operation: Australia.
- (2) Table 2: Total annual mileage by area of operation: States of registration.
- (3) Table 3: Total annual occupant mileage by type of vehicle: States of registration.
- (4) Table 4: Average annual mileage by type of vehicle and area of operation: Australia.
- (5) Table 5: Average annual mileage by type of vehicle: States of registration.
- (6) Table 6: Average annual mileage by area of operation: States of registration.
- (7) Table 7: Average annual mileage by type of vehicle and purpose: Australia.
- (8) Table 8: Average annual mileage by type of vehicle and year of manufacture: Australia.
- (9) Table 9: Total annual business mileage by usage (number of clients): States of registration.
- (10) Table 10: Average annual business mileage by type of vehicle: States of registration.
- (11) Table 11: Average annual laden business mileage by type of vehicle and usage (number of clients): Australia.
- (12) Table 12: Total annual ton-miles travelled by type of vehicle: States of registration.
- (13) Table 13: Average annual ton-miles travelled by type of vehicle: States of registration.
- (14) Table 14: Average rate of fuel consumption by type of vehicle and kind of fuel: Australia.

(B) 14.18 'Bus Fleet Operations Survey, 12 Months Ended 30 June 1971'
Refer to (C) for more detailed information.

(C) 14.19 'Bus Fleet Operations Survey, 12 Months Ended 30 June 1971 (Supplementary Release)'

- (1) Table 1: Total passengers carried by type of service: States of registration.
- (2) Table 2: Total annual mileage by type of service: States of registration.
- (3) Table 3: Total annual mileage by area of operation: States of registration.
- (4) Table 4: Average annual mileage by area of operation: States of registration.

Record 2.103 (Sheet 3)

- (5) Table 5: Total number of buses by size of fleet and type of fuel: States of registration.
- (6) Table 6: Average annual mileage by size of fleet: States of registration.
- (7) Table 7: Total annual mileage by area of operation (capital city, rest of State) and major usage of fleet.
- (8) Table 8: Total annual fuel consumption by major usage of fleet, type of fuel: States of registration.
- (9) Table 9: Government and municipal bus services: Total annual miles travelled, total passengers carried and number of buses used: States of registration.

(D) 'Road Traffic Accident Data from the 1971 Survey of Motor Vehicle Usage. Prepared for the Road Accident Information Seminar, Canberra, March 1974'

- (1) Table 1: Average annual mileage, by type of vehicle: States of registration.
- (2) Table 2: Total annual mileage for all types of vehicle excluding trucks by sex of driver: States of registration.
- (3) Table 3: Total annual mileage for all types of vehicle excluding trucks by sex and age of driver: Australia.
- (4) Table 4: Total annual mileage for all types of vehicle excluding trucks by sex and experience of driver: Australia.
- (5) Table 5: Total annual mileage for all types of vehicle excluding trucks by sex and occupational group of driver: Australia.
- (6) Table 6: Vehicle-accidents per million miles by type of vehicle: States of registration.
- (7) Table 7: Average mileage travelled per vehicle-accident by type of vehicle: States of registration.
- (8) Table 8: Total annual occupant mileage by type of vehicle: States of registration.
- (9) Appendix 1: Population, total annual mileage, motor vehicles registered, road length, area: States.
- (10) Appendix 2: Road traffic accidents involving casualties (number of accidents, persons killed, persons injured): States.

(E) Supplementary Data

More detailed information on the 1971 Survey is available in the form of computer printouts. Data of this kind may be more useful for purposes of analysis and research than the data contained in the publications described in parts (A) to (D) above.

Record 2.104 VEHICLES IN USE - Australia

Survey of Motor Vehicle Usage, 1963

1. Source

Collector and Distributor: Commonwealth Bureau of Census and Statistics (now Australian Bureau of Statistics), Cameron Offices, Belconnen, ACT 2616.

2. Periodicity of Availability

Irregular. Other similar surveys were conducted in 1979, 1976 and 1971 (refer Records 2.101, 2.102 and 2.103).

3. Region of Availability

Australia.

4. Published Information

ABS Ref.No. SB 214 'survey of Motor Vehicle Usage (Preliminary Bulletin) 1963' .

5. Supplementary Information

Edited data are stored by ABS.

6. Limitations

Motorcycles were excluded from the Survey. It is understood that Survey estimates may be less reliable than those obtained from later Surveys.

7. Description of Data Available

Estimates are provided for cars and station wagons, utilities and panel vans, trucks (rigid and articulated by carrying capacity) of numbers on register, mileage, business mileage, goods carried, business served and fuel consumption; by State/Territory.

Record 2.105 VEHICLES IN USE - Australia

Private Bus and Ferry Operators in Australia

1. Source

Collector: Rendel and Partners Economic Studies Group, 166 Albert Street, South Melbourne, Vic. 3205, and Price Waterhouse Associates Pty. Ltd., 447 Collins Street, Melbourne, Vic. 3000.

Distributor: Australian Department of Transport, PO Box 367, Canberra, ACT 2600.

2. Periodicity of Availability

Once-only study, conducted in 1975. The survey includes data from 1969 onwards.

3. Region of Availability

All six Australian States.

4. Published Information

'private Bus and Ferry operators in Australia', comprising three volumes:

Volume 1 Main Report.

2 Appendices.

3 Maps of Study Areas.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

The emphasis of the study was on economic and regulatory aspects of bus and ferry services. Few attempts to obtain State or Australia wide estimates of vehicle usage appear to have been made.

7. Description of Data Available

The study reports provide an inventory of privately owned bus and ferry operating concerns in each of the six States, with data and descriptions of:

(1) Number of bus and ferry services operating.

(2) Number of services provided.

(3) Areas served.

(4) Financial activity and policy considerations.

(5) Type and age of vehicles and frequency of service.

(6) Route kilometres, total distance covered, and number of passengers carried.

Record 2.106 VEHICLES IN USE - Australia

National Travel Survey

1. Source

Collector and Distributor: Bureau of Transport Economics, Civic Permanent Centre, Allara Street, Canberra, ACT 2600.

2. Periodicity of Availability

The National Travel Survey was initiated in 1975. The first data available are for the year 1977/78 and it is envisaged that the survey will be continued on an annual basis.

3. Region of Availability

Australia.

4. Published Information

Bureau of Transport Economics Occasional Papers No.5, 10, 18, 19, and 21.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

The survey is limited to non-urban travel in Australia. The results published with the designation 'preliminary' have not been corrected for sample bias and other related statistical errors. Such corrections will be made at a later stage.

7. Description of Data Available

The objectives of the survey, the methodology used, and the survey results are presented in a series of Occasional Papers. The publications available at the time of writing are:

(A) 'Occasional Paper No.5 - Sampling Processes'

This paper describes the methods used in determining appropriate sample sizes, and the procedure used in drawing samples for the survey.

(B) 'Occasional Paper No.10 - Objectives and Strategies 1977-78'

This paper describes the general background to the survey, and the reasons for its conduct. Aspects such as sampling procedures, the definition of a geographic zoning system for sample distribution, and the development of numerical coding schemes for recording various survey results are presented. Also included is a discussion of the development of the questionnaire format.

(C) 'Occasional Paper No.18 - Determination of Regional Sample Sizes 1977-78'

In this paper, the regional zoning scheme developed for the National Travel Survey, which defines the basic sampling zones involved, is described. Seventy inter-regional routes were chosen, classified into major, secondary and minor corridors, depending on their estimated traffic volume.

Record 2.106 (Sheet 2)

(D) 'Occasional Paper No.19 - Preliminary Statistical Summary, September 1977'

Monthly survey data are presented for July, August and September 1977, and for the September quarter 1977, for each State and Territory, and for Australia. The sample for the three month period included a total of 10,585 net returns. The following information is listed:

- (1) Table 1: Vehicle availability (0,1,2,3,4,over 4 vehicles per household).
- (2) Table 2: Relative errors in estimated trip proportions.
- (3) Table 3: Trip proportions by income (\$0-2000, \$2001-4000, ... over \$30000), and household size (1,2, ... over 9 persons).
- (4) Table 4: Trip proportions by purpose (deliver freight, other business, visiting friends, recreation, holiday, personal affairs), and vehicle type (aircraft, bus, truck, motorcycle, ship, train).
- (5) Table 5: Trip proportions by party size (1,2,... over 9 persons), and vehicle type (as above).
- (6) Table 6: Trip proportions by accommodation (hotel/motel, friend's home, caravan/tent), and by duration of stay at the destination (0,1,2,3-7,8-14,... over 56 nights).
- (7) Table 7: Trip proportions by total duration (as above), and by vehicle type (as above).
- (8) Table 8: Trip proportions by fares paid (no fares, fares paid by household, fares paid by employer), and by vehicle type (as above).
- (9) Table 10: Trip proportions by income (as above), and by vehicle type (as above).
- (10) Table 11: Trip proportion by destination region (as per listings and maps shown) and vehicle type (as above).

(E) 'Occasional Paper No.21 - Geographic Zoning and Coding System 1977-78'

This publication contains a listing of some 8,500 names of localities, townships, suburbs, and places in Australia, for each showing the State or Territory, Place Code, Postcode, LGA Number, Census Statistical Division, Australian Government Region, and National Travel Survey Region. Also included is a directory of all Local Government Areas, showing the LGA Number, State or Territory, National Travel Survey Region, Census Statistical Division, and Australian Government Region.

Record 2.107 VEHICLES IN USE - Australia

Journey to Work: Census Data and Sample Surveys

1. Source

Collector and Distributor: Australian Bureau of Statistics, Cameron Offices, Belconnen, ACT 2616, and ABS regional offices located in capital cities.

2. Periodicity of Availability

Census data: normally once every 5 years (refer to Record 3.101).

Sample surveys: irregular.

3. Region of Availability

Australia.

4. Published Information

ABS Cat.No. 2417.0 'Census of Population and Housing 1976, Population and Dwellings: Summary Tables'.

ABS Ref-No. 17.4 'Journey to Work and Journey to School, August 1974, Preliminary'.

17.5 'Journey to Work and Journey to School, August 1974'.

17.5 'Journey to Work and Journey to School, May 1970'.

5. Supplementary Information

Computer printout tabulations and data held on magnetic tape and microfiche at the ABS regional offices in capital cities. For the 1976 Census, refer to the following bulletins:

ABS Cat.No. 2102.0 'Availability of Census Results'.

2103.0 'Catalogue of 1976 Census Tables'.

2105.0 'Release of Data on Magnetic Tape'.

2106.0 'Release of Data on Microfiche'.

6. Limitations

Extensive information on journey to work is available from the 1976 Census and, to a much lesser extent from the 1971 Census. The information available is mainly in the form of computer printouts for journey to work data for persons residing in capital cities and nearby regions. More detailed information could be retrieved from magnetic tape and microfiche records held by the ABS regional offices.

7. Description of Data Available

(A) 2417.0 'Census of Population and Housing 1976, Population and Dwellings: Summary Tables'

Table 22 shows the number of employed persons by sex, by mode of travel to work (train, bus, ferry or tram, taxi, car as a driver, car as a passenger, motor cycle or scooter, bicycle, walked, worked at home, and totals for using one travel mode only, using two modes, using three or more modes. Data shown is for Australia. Corresponding data for each State and Territory are also available.

(B) 17.4 'Journey to Work and Journey to School, August 1974, Preliminary'

Method of travel, in the same categories as for (A) above, of persons who worked, and of students attending an educational institution, by State and Territory, showing comparative data for the August 1974 and May 1970

Record 2.107 (Sheet 2)

(C) 17.5 'Journey to Work and Journey to School, August 1974'

- (1) Duration of Journey to work (1-4, 5-9, 10-14, ... 90 and over minutes) by hours worked (full-time workers: 1-34, 35-39, 40, 41-48, 49 and over; part-time workers: 1-15, 16-29, 30-34) for Australia, States, capital cities and certain other areas.
- (2) Duration of journey to work, as for (1) above, by occupational groupings (e.g. professional/technical, etc.) for Australia and States.
- (3) Time of leaving home (in quarter hour intervals during peak period, and longer intervals at other times), by duration of journey to work, as for (1) above, by industry (e.g. agriculture, manufacturing, etc.), for Australia. Time of leaving home is also shown for States, State capital cities and certain other areas.
- (4) Mode of travel (train only, train as predominant mode, train as secondary mode, total train; same for bus, tram/ferry, car as driver, car as passenger, motor cycle or scooter, bicycle, walked, other modes) for Australia and States. Main mode of travel for capital cities and certain other areas. Main mode of travel by duration of journey for Australia and States.

For certain data items, separate tabulations are shown for all persons who worked, all persons who travelled to work, married women who travelled to work, full-time students who travelled to school, university, etc.

(D) 17.5 'Journey to Work and Journey to School, May 1970'

The content of data shown in this publication is much the same, though somewhat less detailed, than that described in (C) above, and the same format and presentation have been used.

(E) Supplementary Information

The Catalogue of 1976 Census Tables (ABS Cat.No. 2105) lists some, but not all, of the tabulations of journey to work data that are being held by the various ABS regional offices. Refer to page 127 of the Catalogue under classification TPT (method of travel to work). The following journey to work study areas are listed:

Area 1080	Sydney-Newcastle-Wollongong
2080	Melbourne-Geelong
3080	Brisbane-Gold Coast
4080	Adelaide
5080	Perth
6080	Hobart
6081	North and North West Coast of Tasmania
8080	Canberra-Queanbeyan

The amount of data readily available varies considerably between the ABS regional offices. At the Melbourne office, for example, a computer print-out referred to as the 'CRB Journey to Work Tables' are kept which show the number of persons who travelled from origin zone to destination zone; the zones being the Local Government Areas within the Melbourne-Geelong study area. In addition, microfiche records are available showing the same data by mode of travel and sex of traveller. In Perth and, in particular in Adelaide, journey to work data available are much more detailed and comprehensive; some of the origin and destination zones used are portions of Local Government Areas.

Record 2.108 VEHICLES IN USE - Australia

A Study of the Economics of Road Vehicle Limits

1. Source

Collector and Distributor: The National Association of Australian State Road Authorities (NAASRA), 323 Castlereagh Street, Sydney, NSW 2000.

2. Periodicity of Availability

Once-only study. The survey data were collected during 1974 and 1975.

3. Region of Availability

Australia.

4. Published Information

'A Study of the Economics of Road Vehicle Limits', comprising four volumes:

R1 - Concepts and Procedures

R2 - Evaluation and Conclusions

R3 - Summary and Recommendations

R4 - Commercial Vehicle Surveys

Exposure information is contained in report R4.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

The survey was conducted at 600 observation sites, located on roads of functional class 1, 2, 3, 6 and 7 throughout Australia. A total of 346,058 vehicles were observed; of these, 27,258 vehicles were stopped and their mass and dimensions recorded.

Vehicles not included in the survey were: ambulances, fire fighting vehicles, tow trucks, military vehicles, trucks carrying more than two workmen, road construction equipment, over dimension vehicles travelling under permit, single axle trailers and caravans.

7. Description of Data Available

Separate tabulations are available for each State and Territory, for rural data and urban data. The following descriptors and levels were used:

Body type: flat top open, flat top tarpaulined, tipper, tanker, premix concrete, pantechinon, refrigerated van, car carrier, stock crate, timber jinker, bus.

Vehicle configuration: rigid vehicle with 2, 3, 4, 5 axles, articulated vehicle with 3, 4, 5, 6 axles, truck trailer, doubles, triples, road train with 2, 3 trailers.

Axle type: SS single axles with single tyres, SD single axles with dual tyres, NT normal tandem, ST spread tandem, TS tandem with single tyres, PT pusher tandem, TR triple axles.

Axle load in one tonne increments.

Gross vehicle mass in two tonne increments.

Record 2.108 (Sheet 2)

Average vehicle kilometres travelled per annum.

Average payload of laden vehicles, number of laden vehicles in the samples, total number of vehicles (both laden and unladen) in the sample.

Average tare mass of vehicles.

Vehicle dimensions: total length, height, internal dimensions (drawbar length, front overhang, rear overhang).

Report R4 contains the following tabulations:

- (1) Table A: Body type by vehicle configuration.
- (2) Table B: Body type by axle type.
- (3) Tables C to F: Axle load frequency distributions.
- (4) Table G: Gross vehicle mass frequency distribution.
- (5) Table H: Body type by annual vehicle travel.
- (6) Table J: Body type by vehicle configuration by payload and proportion of laden vehicles.
- (7) Table K: Body type by vehicle configuration by tare mass.
- (8) Tables L to N: Vehicle dimension frequency distributions.

In the case of vehicles which were stopped to record their mass and dimensions, the driver was asked the following questions:

- Where did this trip start?
- Where did this trip finish?
- Length of trip? (0-50, 50-200, greater than 200 miles).
- Fuel Type? (petrol, diesel, LP gas).
- On average, how many miles is this vehicle driven in a week or in a year?
- Make and model of truck.

Information on these items was not included in report R4.

Record 2.109 VEHICLES IN USE - Australia

Seat Belt Surveys: Office of Road Safety

1. Source

Collector and Distributor: Office of Road Safety, Department of Transport, Australia, PO Box 367, Canberra, ACT 2600.

2. Periodicity of Availability

Irregular.

3. Region of Availability

Australia, though mainly limited to capital cities.

4. Published Information

A series of reports, booklets and papers presented at conferences. These are listed in paragraph 7 below.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Seat belt surveys are normally conducted over a short period (e.g. one or two weeks) within a relatively small study area.

7. Description of Data Available

(A) C.J. BOUGHTON, P.W. MILNE and M.H. CAMERON (1980).

'Compulsory Seat Belt Wearing in Australia: Characteristics of Wearers and Non-Wearers'

Report OR 6, ISBN 0 64201723 9, (AGPS 1981).

The report contains a summary of results obtained in the course of six seat belt surveys conducted by the Office of Road Safety. The dates and regions surveyed are listed below:

May 1973 - Melbourne, Adelaide, Hobart.

May 1974 - Brisbane, Perth, Sydney, Newcastle, Wollongong.

December 1975 - Melbourne, Canberra.

December 1976 - Melbourne, Canberra.

March 1978 - Melbourne, Canberra, Adelaide, Perth.

July 1978 - Melbourne, Perth, Adelaide.

- (1) Table 2: Number of occupants observed by seating position in vehicle (front: driver, centre, left, other; rear: right, centre, left, tailgate, other), for Melbourne, Adelaide, Perth - July 1978.
- (2) Table 3: Proportion of passengers (other than drivers) occupying front seats - 1975, 1976 and 1978 surveys.
- (3) Table 4: Fitting rate by type of restraint (lap, sash, lap-sash, harness seat belt; child harness, child seat) by seating position (driver, front centre, front left; rear right, centre, left), regardless of whether seat occupied, for Melbourne, Adelaide, Perth - July 1978.

Record 2.109 (Sheet 2)

- (4) Table 5: Percentage of occupants at least 8 years of age of front outboard seating positions with lap-sash belts available, for all surveys.
- (5) Table 6: Percentage wearing available seat belts for occupants at least 8 years of age by seating position (as in Table 4), by type of belt (lap, sash, lap-sash, harness), for Melbourne, Adelaide, Perth July 1978.
- (6) Table 7: Wearing rates for front outboard occupants at least 8 years of age, by type of belt (lap-sash, all seat belts), for all surveys.
- (7) Table 8: Wearing rates of available lap-sash belts for front outboard occupant at least 8 years of age by seating position (driver, front left passenger), for all surveys.
- (8) Table 9: Wearing rates of available lap-sash belts for front outboard occupants at least 8 years of age by occupant age (8-29, 30-49, 50 years or older), by sex, by seating position (drivers, front left passengers, front outboard occupants), for all surveys combined.
- (9) Table 10: Wearing of available lap-sash belts by front outboard occupants aged at least 8 years by day of week (Thursday, Friday, Saturday, Sunday), for 1973, 1974, 1975 and 1978 surveys.
- (10) Table 11: Wearing of available lap-sash belts by front outboard occupants aged at least 8 years, by day of week (as in Table 10), for 1973, 1974, 1975 and 1978 surveys combined.
- (11) Table 12: Wearing of available lap-sash belts by front outboard occupants aged at least 8 years by time of day (6 am - 6.59 pm, 7 pm - 12 am), for all surveys. Several graphs are also included, showing wearing rates by hour of day.
- (12) Table 13: Percentage wearing of available lap-sash belts by front outboard occupants aged at least 8 years, by weather condition (fine, overcast, raining), for 1975, 1976 and 1978 surveys.
- (13) Table 14: Wearing of available lap-sash belts by drivers alone or accompanied by left front passengers aged at least 8 years, for all surveys.
- (14) Table 15: Wearing of available lap-sash belts by drivers alone or accompanied by left front passengers aged at least 8 years, for all surveys combined.
- (15) Table 16: Same as Table 15, with separate data according to driver age (as for Table 9), and sex.
- (16) Table 17: Manner of wearing static lap-sash belts for front outboard seating position occupants (belt worn loose, twisted, with buckle on abdomen, incorrectly adjusted, correctly adjusted).

Record 2.109 (Sheet 3)

(B) A.J. CARTER (1979). 'Effect of Seat Belt Design Rules on Wearing Rates'
Report OR 5, ISBN 0 64201639, (AGPS 1980).

This report is based on data collected in the March 1978 seat belt survey, which was referred to in (A) above. The report contains some of the tabulations listed under (A) above and, in addition, provides data according to more detailed age categories of occupants (8-13, 14-29, 30-49, 50 years or older), and vehicle age categories (vehicles manufactured prior to 1965, 1965-1968, 1969-1973, 1974, 1975-1978).

(C) I.R. JOHNSTON and M.H. CAMERON (1979). 'The Use Of Television Publicity to Modify Seat Belt Wearing Behaviour'
Report OR 3, ISBN 0 64201567 8, (AGPS 1979).

This report describes three experiments aimed at measuring the effectiveness of a television publicity campaign which encouraged viewers to wear their seat belt correctly adjusted. In each case, a survey before, and a corresponding survey after the campaign were conducted. At the same time, surveys were also carried out on a control sample in a region where the campaign was not televised. The surveys were conducted in 1973 in Adelaide, Melbourne and Hobart, and in 1974 in Newcastle, Wollongong, Brisbane, Perth and Sydney. The report contains data on the manner in which seat belts were worn, in terms of tightness, buckle position and flatness.

(D) C.J. BOUGHTON and I.R. JOHNSTON (1979). 'The Effects of Radio and Press Publicity on the Safe Carriage of Children in Cars'

Paper presented at the SAE Congress and Exposition in Detroit, USA, 1979.

The data contained in this report were collected in March and July 1978 in Melbourne, Adelaide and Perth. The publicity campaign took place in April 1978 and thus information was obtained on child restraint usage behaviour both before and after the campaign.

- (1) Table 1: Number of cars observed, number of occupants, and number of child occupants (less than 8 years of age), mean occupancy, mean child occupancy.
- (2) Table 2: Number of children and their percentage by age (0-9 months, 10 months-4 years, 5-7 years).
- (3) Table 3: Child restraint availability in seating positions occupied by children, by age (same as in Table 2), by type of restraint (bassinet, child restraint, adult seat belt, none).
- (4) Table 4: Compliance of observed child restraint with Australian Standard (approved, unapproved, percentage unapproved), by age of child.
- (5) Table 5: Percentage of restraints used where fitted, by type of restraint (child restraint, seat belt, all restraints), by age of child.
- (6) Table 6: Seating position of children in cars (front, back).
- (7) Table 7: Percentage of children located in front seat positions, by age of child.

Record 2.109 (Sheet 4)

- (8) Table 8: Percentage of unrestrained children in front seat positions, by age of child.
- (9) Table C1: Availability of restraints by age of child, by type of restraint (restrained bassinet, child seat, child harness, seat belt, none).
- (10) Table C2: Use of child restraints where fitted, by type of restraint, by age of child (as in Table C1).
- (11) Table C3: Location in car of unrestrained children (front, back), by age of child.

For each table listed above, separate data are shown for Melbourne, Adelaide and Perth, both for before and after the campaign.

(E) P.W. MILNE (1979). 'Fitting and Wearing of Seat Belts in Australia: The History of a Successful Countermeasure'
Report OR2, ISBN 0 64250978 6, (AGPS 1979).

The report contains data on fitting rates and wearing rates of seat belts in Australia, derived from surveys conducted between 1964 and 1978.

(F) Other Publications

- (1) 'Proceedings of Seat Belt Seminar, Melbourne (1976), conducted by the Department of Transport, Australia'. ISBN 0 642 01377 2.
- (2) C.J. BOUGHTON and P.W. MILNE (1978). 'Occupant Restraint in Motor Vehicles in Australia'. Proceedings of the 23rd Conference of the American Association for Automotive Medicine, and the 7th Conference of the International Association for Accident and Traffic Medicine, Ann Arbor, USA, 1978.
- (3) C.J. BOUGHTON, B.R. LANCASHIRE and I.R. JOHNSTON (1977). 'Child Restraint Usage in Melbourne and Canberra: Evaluation of Victorian Legislation'. Proceedings of the 6th International Conference of the International Association for Accident and Traffic Medicine, Melbourne, 1977.
- (4) A.P. VULCAN, R. UNGERS and P.W. MILNE (1975). 'Australian Approach to Motor Vehicle Safety Standards'. Proceedings of the 4th International Congress of Automotive Safety, San Francisco, 1975.
- (5) R. UNGERS (1974). 'The Introduction of Compulsory Seat Belt Wearing Laws in Australia and their Effect'. Proceedings of the Traffic Safety Conference, Ottawa, 1974.

Record 2.110 VEHICLES IN USE - Australia

Submissions to the Committee on Road Safety

1. Source
Collector and Distributor: Australian Bureau of Statistics, Cameron Offices, Belconnen, ACT 2616.
2. Periodicity of Availability
Irregular.
3. Region of Availability
Australia.
4. Published Information
 - (1) 'Second Submission to the House of Representatives Standing Committee on Road Safety, June 1975'.
 - (2) 'Submission to the House of Representatives Select Committee on Road Safety, May 1973'.
5. Supplementary Information
Internal documentation and working papers.
6. Limitations
This is a secondary source of data, based entirely on the 1971 Survey of Motor Vehicle Usage (shown in Record 2.103) and other data previously published by the Australian Bureau of Statistics. Only cars and station wagons are included.
7. Description of Data Available
 - (A) 'Second Submission, June 1975'
 - (1) Cars and station wagons: annual mileage travelled by year of manufacture (prior to 1955, 1955-59, 1960-64, 1965-69, 1970-71).
 - (2) Table 1: Average mileage travelled per annum per vehicle, by size (large, small), and make (Mazda, Ford, Holden, etc.).
 - (3) Table 2: Proportional usage by female drivers, by vehicle size and make (as above).
 - (4) Table 5(a): Proportion of mileage driven, by length of driving experience of driver, (less than 6 years, 6-10, 11-15, 16 years and over), by sex of driver, by vehicle size.
 - (5) Table 5(b): Same as Table 5(a), but with proportions shown as percentages of each length of driving experience class.
 - (6) Table 6(a): Proportion of mileage driven, by sex and age of driver (20 and under, 21-25, 26-30, 31-40, 41-50, 51-60, over 60 years), by vehicle size.

Record 2.110 (Sheet 2)

(7) Table 6(b): Same as Table 6(a), but with proportions shown as percentages of each age class.

(8) Graphical presentation of data contained in Table 1 and Table 2

For each item listed above, the standard error of the estimate is also indicated.

(B) 'Submission, May 1973'

This report provides a brief description of the 1971 Survey of *Motor Vehicle Usage*, and suggests the following measures of exposure: persons killed per 100,000 of mean population, persons killed per 10,000 motor vehicles on register, persons killed per 100 million vehicle miles travelled. Data are shown for these three measures, for the years ended 30 June 1963 and 1971, by State and Territory.

Record 2.111 VEHICLES IN USE - Australia

Public Transport Statistics

1. Source
Collector and Distributor: Australian Bureau of Statistics, Cameron Offices, Belconnen, ACT 2616.
2. Periodicity of Availability
Irregular.
3. Region of Availability
New South Wales, Queensland, South Australia, Western Australia.
4. Published Information
ABS Cat.No. 9101.1 'Transport and Communications 1976-77, New South Wales'.
9101.3 'Transport 1977-78, Queensland'.
9102.4 'Transport and Communications 1977-78, South Australia'.
9101.5 'Transport and Communications 1976-77, Western Australia'.
5. Supplementary Information
Internal documentation and working papers.
6. Limitations
Uniform data for all Australian States and Territories are not available.
7. Description of Data Available
The bulletins listed above contain the following vehicle usage data:

(A) 9101.1 'Transport and Communications 1976-77, New South Wales'
Data on New South Wales State bus services for the six year period 1971-72 to 1976-77:

- (1) Rolling stock at 30 June by type of bus (single-decked, double-decked), by type of engine (forward-engined, underfloor-engined, rear-engined).
- (2) Number Of passengers carried and vehicle kilometres travelled during the year by region (Sydney, Newcastle).

(B) 9101.3 'Transport 1977-78, Queensland'
Data on Queensland urban road passenger services in cities of 10,000 or more population for 1977-78:

- (1) Total route length (km) at 30 June 1978.
- (2) Number of vehicles in use at 30 June 1978.
- (3) Vehicle kilometres travelled during the year.
- (4) Number of passengers carried during the year.

For each of the data items listed above, separate figures are available by region and type of service (Brisbane Statistical Division: municipal, private, Rockhampton: municipal; Toowoomba: private; Townsville: private; other: private including the services at Bowen, Bundaberg, Cairns, Caloundra, Gladstone, Gold Coast, Gympie, Maryborough, Mount Isa; for this grouping, separate details are not available).

Record 2.111 (Sheet 2)

(C) 9102.4 'Transport and Communications 1977-78, South Australia'

Data on State Transport Authority bus and tram operations for the four year period 1974-75 to 1977-78:

- (1) Total route length (km) for trams and buses.
- (2) Vehicle kilometres travelled during the year, for trams and buses.
- (3) Number for passengers carried during the year.
- (4) Number of vehicles in use (rolling stock) at end of year.
- (5) Seating capacity available at end of year, for trams and buses.
- (6) Current used for traction (kWh) during the year.

Except for item (3), separate data available for trams and buses.
Item (6) is for trams only.

(D) 9101.5 'Transport and Communication 1976-77, Western Australia'

Data on government and municipal bus operations for the five year period 1972-73 to 1976-77:

- (1) Number of vehicles in use at end of year.
- (2) Route kilometres operated.
- (3) Bus kilometres travelled during the year.
- (4) Number of passenger journeys during the year.

For each of the data items listed above, separate figures are available for the Perth Metropolitan Passenger Transport Trust, Western Australian Government Railways, and the Eastern Goldfields Transport Board.

Record 2.112 VEHICLES IN USE - Australia

Australian Department of National Development and Energy

1. Source

Collector and Distributor: National Energy Office, Department of National Development and Energy, Canberra, ACT 2600.

2. Periodicity of Availability

Monthly.

3. Region of Availability

Australia.

4. Published Information

Monthly and annual tabulations of motor vehicle fuel consumed.

5. Supplementary Information

Not known.

6. Limitations

It could be expected that some of the fuel sales data included fuel used by internal combustion engines other than motor vehicles.

7. Description of Data Available

The tabulations published by the Department show the consumption of major petroleum products based on oil industry sales by State marketing areas.

The data shown include kilolitres consumed by type of fuel (LPG, motor-spirit, auto distillate, other classifications) by State marketing area. The series is available from at least 1970, although some categories may have changed; e.g. addition of LPG since January 1980.

It is important to note that the 'State marketing areas' used by the oil industry, do not coincide with State boundaries.

Record 2.113 VEHICLES IN USE - Australia

Australian Road Travel Information

R.H. BURKE

1. Source

Collector and Distributor: Bureau of Transport Economics, Civic Permanent Centre, Allara Street, Canberra, ACT 2600.

2. Periodicity of Availability

Once-only study, dealing with the period 1963 to 1976.

3. Region of Availability

Australia.

4. Published Information

R.H. BURKE (1978). 'Australian Road Travel Information'.
Staff Paper, Bureau of Transport Economics.

5. Supplementary Information

Author's working papers and internal documentation.
Refer also to Records 1.109 and 2.112.

6. Limitations

The main aim of this study was to examine the accuracy and effect corrections where necessary to the vehicle kilometres of travel estimates which are derived from annual sales of motor vehicle fuel.

The report is concerned only with the two main types of fuel: petrol and diesel fuel. Data on petrol consumption are based on periodic surveys undertaken by the Department of National Development and Energy, which are described in Record 2.112. In these surveys, returns are obtained from oil companies which indicate sales of petrol by State marketing areas. To the extent to which these marketing areas do not coincide with political State boundaries, due corrections were made in accordance with population statistics.

Data on diesel fuel consumption are estimates based on information on revenue collections from excise and imports of automotive diesel fuel, published by the Australian Bureau of Statistics, and on oil industry sales data.

Data on fuel consumption rates are estimates based on vehicle kilometres of travel data derived from motor vehicle usage surveys conducted by the Australian Bureau of Statistics.

Data on the average annual kilometres travelled per vehicle are estimates derived by dividing the total vehicle kilometres of travel by the number of vehicles on register for each State and Territory, for each vehicle type.

Due allowance was made for the incomplete coverage of some data items in the relevant motor vehicle usage surveys, and the fact that these surveys pertained to years ended 30 September. For some items, data for NSW include ACT data. For the NT, only limited information is available. Data for Australia include all States and Territories.

Record 2.113 (Sheet 2)

7. Description of Data Available

- (1) Vehicle kilometres of travel by State and Territory, for the year ended 30 June, for the years 1963 to 1976, by type of vehicle (cars and station wagons, other vehicles).
- (2) Average annual kilometres travelled per vehicle, same categories as for (1) above.
- (3) Adjusted estimates of the number of motor vehicles on register. These are described more fully in Record 1.109.
- (4) Motor vehicle fuel consumption by type of fuel (petrol, diesel), by State and Territory, for the year ended 30 June, for the years 1963 to 1976 (million litres).
- (5) Fuel consumption rate by State, by vehicle type (cars and station wagons, other vehicles), for the year ended 30 June, for the years 1963 to 1976 (kilometres per litre).

Record 2.114 VEHICLES IN USE - Australia

Australian Travel Research Conference

1. Source

Collector and Publisher: Australian and State Tourist authorities being members of the Australian Travel Research Conference.

2. Periodicity of Availability

1973/74.

3. Region of Availability

Australia.

4. Published Information

'Survey of Australian Tourism 1973/74'.

5. Supplementary Information

Not known.

6. Limitations

Not known.

7. Description of Data Available

The publication 'Survey of Australian Tourism 1973/74' contains the following data:

- (1) Amount of travel, origin and destination data and type of travel:
by State of destination.
- (2) Age, sex, income and occupation of travellers.
- (3) Main destinations: by State.

Record 2.201 VEHICLES IN USE - New South Wales

Sydney Bus Services

1. Source

Collector and Distributor: Public Transport Commission, 11 York Street, Sydney, NSW 2000.

2. Periodicity of Availability

Annual Report: annual; bus time-tables: continually updated; bus route map: irregular.

3. Region of Availability

Sydney metropolitan area.

4. Published Information

- (1) Annual Report.
- (2) Bus time-tables.
- (3) Bus Train Ferry Services (pocket map).

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Using the time-tables, it would be possible to determine the theoretical number of buses passing a given point within the bus route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, etc.).

7. Description of Data Available

(A) Annual Report

- (1) Bus fleet in use: number of vehicles, total passenger capacity, average passenger capacity per vehicle. Separate data available by type of vehicle (air conditioned road motor coaches, forward engine single deck buses, under floor single deck buses, double deck buses), by area (Sydney, Newcastle).
- (2) Number of passengers carried by area, with comparative data for the four previous years.
- (3) Total bus kilometres travelled during the year, and route kilometres covered by the bus services (total for Sydney and Newcastle).

(B) Bus Time-Tables

A series of booklets, each describing the route and showing a route diagram, and the arrival and departure times at a number of key bus stops along the route. Stand numbers, at bus stops where stands are provided, are also indicated. Separate data are shown for weekdays, Saturdays, Sundays and holidays falling between November 1 and April 30, and Sundays and holidays falling between May 1 and October 31.

Record 2.201 (Sheet 2)

(C) Bus Train Ferry Services (pocket map)

The map shows the Sydney metropolitan region, indicating the location of bus routes, using a colour code to distinguish between city-bound and inter-suburban bus routes. A travel directory, indicating how to get to each locality is also included. Information on other public transport modes (train, ferry) is also shown.

Record 2.202 VEHICLES IN USE - New South Wales

Vehicle Usage Surveys: NRMA

1. Source

Collector and Distributor: National Roads and Motorists' Association (NRMA), 151 Clarence Street, Sydney, NSW 2000.

2. Periodicity of Availability

Irregular.

3. Region of Availability

New South Wales.

4. Published Information

A set of reports described in paragraph 7 below.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

A number of limitations arise from the survey methodology used, which is described in paragraph 7 below.

7. Description of Data Available

(A) Journey to Work Surveys

- (1) R.G. COX and D.M. FLEMING (1978). 'Use of Cars for Suburban Work Trips'.

The survey was conducted between July and September 1978. The findings were based on 2,674 completed questionnaires from respondents employed in 5 municipalities of Sydney: South Sydney, Botany, Bankstown, Auburn, Warringah. The report contains data on: proportion of occupational groups, mode of travel, frequency of motor vehicle trips, vehicle occupancy, daily distance travelled, travel speeds, time of departure, reasons for using a motor vehicle in preference to other travel modes, attitudes to public transport, parking facilities used, attitudes to car pooling.

- (2) R.G. COX and D.M. FLEMING (1976). 'Use of Cars for CBD Work Trips'.

The survey was conducted between March and July 1976 in the central business district (CBD) of Sydney. The findings were based on 1,476 completed questionnaires. Of these, 151 were obtained from on-street parkers, 393 from respondents who parked in a company building, and 932 from motorists who parked in public parking stations. The report contains data on: number of trips per week to the city, vehicle occupancy, time taken for inward journey, time taken for outward journey, travel speeds on inward and outward journeys, time of arrival at and departure from the city, reasons why vehicle was used for journey to work, attitudes to public transport, attitudes to car pooling. In some of the tables presented, respondents were grouped by Local Government Area of residence.

Record 2.202 (Sheet 2)

(B) Travel Speed Surveys

- (1) B. SEARLES (1980). 'Travel Speeds on Four Major Northern Arterial Routes in Sydney'.

The survey was carried out during five weekdays in March 1980 on routes between North Sydney, Pymble, St. Ives, French's Forest and Manly. The report contains data on average sample speed and travel times for each route, and a comparison with data obtained from similar surveys conducted in 1977, 1978 and 1979.

- (2) B. SEARLES (1980). 'Travel Speeds on Four Southern Routes in Sydney'.

The survey was carried out during five weekdays in April 1980 on routes between Sydney (Surry Hills, Darlington, Redfern) and Taren Point, Brighton—Sands, Sylvania, Rockdale, Peakhurst and Bexley. The report contains data on average sample speed and travel times for each route, and a comparison with data obtained from a similar survey conducted in 1978.

- (3) B. SEARLES (1979). 'Travel Speeds in the Western Suburbs'.

The survey was carried out during five weekdays in April 1979 on routes between Chippendale, Parramatta, St. Marys and Kellyville. In addition to data on average sample speed and travel times, the report also contains information on traffic volumes and vehicle occupancy. Separate data are available for cars, trucks and buses.

(C) Transit Lane Surveys

- (1) B. SEARLES (1979). 'Assessment of Victoria Road Transit Lane: Third Year of operation'.

The survey was carried out during five weekdays in September 1979 on the Victoria Road transit lane between Gladesville and Rozelle. In the report, traffic volume and vehicle occupancy data are compared with corresponding data collected during 1976, 1977 and 1978.

- (2) B. SEARLES (1979). 'The Morning Transit Lane from Balgowlah to Neutral Bay'.

The report deals with data collected by the NRMA between 1974 and 1978, and the Department of Motor Transport between 1974 and 1975 on the transit lane between Sydney Road, Balgowlah and Military Road, Cremorne. Data included are: traffic volume, vehicle occupancy and number of daily person-trips.

(D) Fuel Consumption Surveys

- (1) Fuel Consumption During Road Tests (1977).

This report contains results of an ongoing fuel consumption survey conducted by the NRMA, showing data for the period 1973 to 1977. A fixed testing route was used of approximately 500 km length, the route passing through various parts of the Sydney metropolitan area and rural areas in New South Wales. All tests were made on brand new vehicles. A total of 122 cars of different makes and models were tested.

Record 2.202 (Sheet 3)

(2) Internal records on NRMA fleet operations.

Internal records are maintained on the fuel consumption characteristics of all vehicles operated by the NRMA during their initial 15,000 km of travel. The 1978 summary of operations lists 46 cars, showing make and model, type of transmission, engine capacity and fuel consumption, both in miles per gallon and litres per 100 kilometres.

Record 2.203 VEHICLES IN USE - New South Wales

Seat Belt Surveys: NRMA

1. Source

Collector and Distributor: National Roads and Motorists' Association (NRMA), 151 Clarence Street, Sydney, NSW 2000.

2. Periodicity of Availability

Irregular.

3. Region of Availability

New South Wales. In some instances, mail questionnaire surveys were also conducted in other States, in conjunction with other motorists' associations.

4. Published Information

A set of reports described in paragraph 7 below.

5. Limitations

A number of limitations arise from the survey methodology used, which is described in paragraph 7 below.

7. Description of Data Available

(A) D. FLEMING (1980). 'Availability, Wearing and Adjustment of Seat Belts'
ISBN 909932 63 8.

Similar surveys were also conducted in 1978, 1976, 1974, and 1972. The surveys were conducted at suburban shopping centres (Parramatta, Caringbah, Carlingford, Hornsby, Double Bay, Chatswood, Warringah Mall and Blacktown). The report on the 1980 survey lists data on seat belts observed in 800 parked cars and 3,200 moving cars, showing seat belt availability by seating position, seatbelt type (inertia reel, lap-sash), vehicle occupancy by sex, wearing rate, and whether belts were correctly or incorrectly adjusted by wearers.

(B) D. FLEMING (1979). 'The use of Restraints by Children in Automobiles'
ISBN 909932 56 5.

Similar surveys were also conducted in 1977, 1976, 1974, and 1972. The surveys were conducted at suburban shopping centres (Hornsby, Chatswood, Warringah Mall, Carlingford Court, Miranda Fair, Parramatta, Blacktown and Double Bay). The report on the 1979 survey lists data on a sample of 1,500 cars, showing number of children observed by age (babies, ½-4 years, 4-7 years), child occupancy by age, position of children in cars (front, back), type of restraint worn (child seat, harness, booster cushion, adult seat belt), the proportion of children wearing a restraint, availability of restraints, whether restraints were approved/not approved and whether worn correctly adjusted.

(C) R.G. COX and D.M. FLEMING (1978). 'Survey of Child Restraints in Australia'

This survey was conducted in conjunction with the Australian Automobile Association and motorists' associations in all parts of Australia. A survey coupon was included in each of the participating motorists' association journals. A total of 817 completed coupons were received, providing data on the type and brand of restraint fitted, the age of children generally using the restraint, any evidence of webbing wear, and the type of vehicle used.

Record 2.203 (Sheet 2)

(D) R.G. COX and D.M. FLEMING (1976). 'Seat Belts in 1975 Model Vehicles'

This was a coupon survey similar to that described in (C) above, conducted jointly by the NRMA and the Western Australian motorists' organisation RACWA. The coupons were included in the journals of both organisations in November and December 1975. A total of 398 completed questionnaires were obtained (272 from New South Wales, and 126 from Western Australia). The information obtained was on type and brand of seat belt fitted, and owners' views on the serviceability, comfort and likely performance of seat belts in the event of a collision.

(E) D.M. FLEMING (1973). 'Seat Belt Survey, Parts 1 and 2'

Also a coupon survey, conducted in New South Wales, Queensland and South Australia through the respective motorists' organisation journals. The number of completed questionnaires used in the survey were: 4,023 in NSW, 2,523 in Queensland and 1,335 in SA. Information was obtained on type, make and age of car, age of belts if fitted, and items similar to those described in (D) above.

Record 2.204 VEHICLES IN USE - New South Wales

Seat Belt Surveys: TARU

1. Source

Collector and Distributor: Traffic Accident Research Unit (TARU), Traffic Authority of NSW, PO Box 110, Rosebery, NSW 2018.

2. Periodicity of Availability

Irregular.

3. Region of Availability

New South Wales.

4. Published Information

A series of reports, listed in paragraph 7 below.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Not known.

7. Description of Data Available

- (1) D.C. HERBERT and D. CUTTING (1978). 'Crash Protection for Children after their Third Birthday'. Report 2/78.
- (2) K. FREEDMAN and J. LUKIN (1977). 'Occupant Protection for Children: A Survey of Restraint Usage, Attitudes and Knowledge'. Report 8/77.
- (3) J.M. HENDERSON, D.C. HERBERT, B.A. VAZEY and J.D. STOTT (1976). 'Performance of Child Restraints in Crashes and Laboratory Tests'. Proceedings of the Seat Belt Seminar, Department of Transport, Australia, Melbourne, 1976.
- (4) P.G. CROFT (1976). 'The Use of Occupant Restraint Devices'.
- (5) K. FREEDMAN and J. SCHREIBER (1975). 'Child Restraints: Preliminary Information on Usage and Attitudes'.
- (6) B.A. VAZEY, D.C. HERBERT and V. LEITIS (1974). 'Crash Protection for Babies'. Report 2/74.
- (7) D.C. HERBERT, B.A. VAZEY, J.M. WYLLIE, V. LEITIS, J.D. STOTT and R.G. VAUGHAN (1974). 'Crash Protection for the sub-teen child'. Report 4/74.
- (8) G.C. AVERY (1973). 'The Role of Communication and Propaganda in Traffic Safety'. Report 3/73.
- (9) J.M. HENDERSON and R. WOOD (1973). 'Compulsory Wearing of Seat Belts in NSW'. Report 4/73.
- (10) K. FREEDMAN, P. CHAMPION AND M. HENDERSON (1971). 'Seat Belts: A Survey of Usage and Attitudes'.
- (11) N. SKINNER, J.M. HENDERSON and D.C. HERBERT (1970). 'Compulsory Wearing of Seat Belts: A Feasibility Study'. Report 6/70.

Record 2.205 VEHICLES IN USE - New South Wales

Journey to Work: Planning and Environment Commission

1. Source

Collector and Distributor: New South Wales Planning and Environment Commission, PO Box 3927, Sydney, NSW 2001.

2. Periodicity of Availability

Irregular.

3. Region of Availability

Sydney metropolitan area and environs, including the Newcastle and Wollongong regions.

4. Published Information

(1) 'Work Places and Work Trips 1971'. published 1976.

(2) 'The Journey to Work 1966', published 1972.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

This is a secondary source of data, based entirely on journey to work statistics collected as part of the 1966 and 1971 Census of Population and Housing.

7. Description of Data Available

(A) 'Work Places and Work Trips 1971' (Research Study No. 2)

The study area included the coastal and some adjoining municipalities between Shoalhaven, City of Blue Mountains, and Port Stephens. A number of detailed maps of several portions of the study area are included.

The Census data are presented in 19 tables, showing the number of work trips by Local Government Area, occupation (professional, management, clerical, sales, fanners, miners, transport, craftsmen, sport, forces, other), and industry (ASIC codes 1 to 13) for various sub-groupings.

(B) 'The Journey to Work 1966' (Technical Bulletin No. 2)

The data presented in this report follows much the same pattern as that in the 1971 study described above, except that the maps shown indicate the distribution of work trip flows in considerable detail.

Record 2.206 VEHICLES IN USE - New South Wales

Vehicle Fleet Data: Australia Post

1. Source

Collector and Distributor: The Secretary, Australia Post, 71 Rathdowne Street, Carlton, Vic. 3053.

2. Periodicity of Availability

Internal records, relating mainly to 1978 and 1979.

3. Region of Availability

Primarily New South Wales. Some data also available for Australia, by State.

4. Published Information

None.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

vehicle usage and accident data represent a census of activities concerned with motorcycle and bicycle usage by Australia Post staff in New South Wales. The applicability of these data to the general community is extremely limited.

7. Description of Data Available

The information available is derived from an internal survey conducted by Australia Post during 1978 and 1979. Data pertain to the usage of motorcycles and bicycles by Australia Post employees.

(1) Number of vehicles in use, by region (NSW) .

(2) Average annual kilometres travelled (NSW) .

(3) Average annual hours of exposure (NSW) .

(4) Total number of users, accident involvements, costs incurred as a result of accidents, manhours lost, by region, for Australia, and for each State.

Record 2.301 VEHICLES IN USE - VictoriaMelbourne Bus and Tram Services1. source

Collector and Distributor: Melbourne and Metropolitan Tramways Board,
616 Little Collins Street, Melbourne, Vic. 3000.

2. Periodicity of Availability

Annual Report: annual; internal records: continually updated; tram and
bus time-tables: continually updated; tram and bus route maps: irregular.

3. Region of Availability

Melbourne metropolitan area.

4. Published Information

- (1) Annual Report.
- (2) Time-tables.
- (3) Route maps.

5. Supplementary Information

Computer records and other internal documentation.

6. Limitations

Using the time-tables, it would be possible to determine the theoretical number of buses and trams passing a given point within the route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, etc.).

7. Description of Data Available(A) Internal Records

- (1) Computer records: a comprehensive data bank from which information on vehicle usage characteristics could be obtained in considerable detail (e.g. how many trams or buses are in service for each hour of the day, by depot, by route, etc.). A suite of programs is used for generating and updating time-tables; the hourly tram and bus traffic at any stop along the route could be determined from this system. Similarly, daily kilometres travelled and related statistics could be found.
- (2) Manual records: maintained by the Roster Section, showing the number of vehicles allocated to each depot, the number of vehicles available for service each day, and the number of vehicles in use for each route on an hourly basis.
- (3) Map of all tramway installations and depots.
- (4) Detailed engineering drawings for all tramway track sections.

(B) Annual Report

Separate data for tram and bus operations, for the current year and the preceding year, showing:

- (1) Number of passengers carried during the year.
- (2) Vehicle kilometres travelled during the year.
- (3) Number of passengers boarded per kilometre run.

Record 2.301 (Sheet 2)

The Annual Report also contains a complete listing of all tram and bus routes, for each route showing the route number, a description of the origin and destination points, and the route length.

Also included are a summary of operations for the last 11 years, showing annual number of passengers carried and vehicle kilometres run, separately for trams and buses, and a colour-coded map of the tramway route system.

(C) Tram and Bus Time-Tables

A series of leaflets, each describing the route and showing the arrival and departure times at a number of key stops along the route. Separate data are provided for weekdays, Saturdays, Sundays and public holidays.

(D) Melbourne Public Transport Pocket Map

The map shows the Melbourne metropolitan area, indicating the location of tram and bus routes. All services, provided by the Tramways Board, Victorian Railways, the Bus Proprietors' Association and the Transport Regulation Board are indicated. For each route, the type of service (tram, Tramways Board bus, private bus) and route number are shown. A list of all routes, arranged in route number sequence, is also shown, with a description of each route.

Record 2.302 VEHICLES IN USE - VictoriaVehicle Usage Surveys: RACV

1. Source
Collector and Distributor: Royal Automobile Club of Victoria (RACV),
123 Queen Street, Melbourne, Vic. 3000.
2. Periodicity of Availability
Irregular.
3. Region of Availability
Melbourne Metropolitan area.
4. Published Information
A series of reports, listed in paragraph 7 below.
5. Supplementary Information
Internal documentation and working papers.
6. Limitations
The samples taken are limited to certain major arterial and sub-arterial roads.
7. Description of Data Available

(A) 'Bayside Corridor Travel Time Study (1980)'
Report TS 80/1.

The study area included 15 arterial roads and sub-arterial roads in bay-side suburbs of Melbourne, ranging between Fishermens Bend, Oakleigh, Clayton, Cheltenham and Mentone, covering a total route length of 150 km. The report lists travel times, average speeds, running times, delay times and delay per km travelled during morning and afternoon peak periods. A set of travel time contour maps are also included for city-bound and from-city traffic, both for the period March-July 1978, and February-May 1979 which described conditions before and after the opening of West Gate Bridge.

(B) 'Traffic Survey 1976 - Melbourne Metropolitan Area'

The report is based on four studies: A Brighton (October 1975), B Glen Waverley Corridor (June 1975), C Eastern Corridor (October 1975) and D North-West (March 1976). The study area included a total of 41 major roads throughout the Melbourne metropolitan area with a total route length of 612 km. Data were collected during morning and afternoon peak periods, and also during the midday off-peak period. The report contains a number of travel time contour maps for city-bound and from-city traffic, and vehicle delay maps showing regions having an average delay of less than 1, 1-2, and over 2 minutes per km travelled.

Similar surveys were also conducted in 1971 and 1970. A separate survey of the Glen Waverley Corridor was completed in November 1974

Record 2.303 VEHICLES IN USE - Victoria

Vehicle Usage Surveys: ARRB

1. Source
Collector: Rankine and Hill Pty. Ltd., 459 Little Collins Street, Melbourne, Vic. 3000.
Distributor: Australian Road Research Board, 500 Burwood Road, Vermont South, Vic. 3133.
2. Periodicity of Availability
Once-only study using data of a survey conducted in 1972.
3. Region of Availability
Selected streets in the Melbourne metropolitan area.
4. Published Information
RANKINE AND HILL (1974). 'Factors affecting Travel Speed on Urban Roads'. Australian Road Research Board report ARR 26.
5. Supplementary Information
Working papers and data held by the Australian Road Research Board.
6. Limitations
Not known.
7. Description of Data Available
The study investigated the validity of using vehicle number-plate observations to determine traffic flow and vehicle speed in urban streets. Tables contain data on travel and delay times for specified route sections. Mathematical analysis established that most of the variability in measured peak period travel speeds was due to physical and traffic factors such as number of vehicles, proportion of heavy vehicles and number and nature of intersections.

Vehicle age information was also collected, and hence estimates of vehicles in use by age could be derived.

Record 2.304 VEHICLES IN USE - Victoria

Seat Belt Surveys: ROSTA

1. Source

Collector and Distributor: Road Safety and Traffic Authority,
801 Glenferrie Road, Hawthorn, Vic. 3122.

2. Periodicity of Availability

Once-only study, covering the period 1971 to 1976.

3. Region of Availability

Victoria.

4. Published Information

Described in paragraph 7 below.

5. supplementary Information

Authors' working papers and internal documentation.

6. Limitations

The surveys were limited to drivers and front seat passengers.

7. Description of Data Available

(A) A.P. VULCAN (1977). 'Victorian Experience with the Compulsory Wearing of Seat Belts'

Proceedings of the 6th International Conference of the International Association for Accident and Traffic Medicine, Melbourne, 1977.

The data shown were collected during annual seat belt surveys, conducted in Victoria between 1971 and 1976.

(1) Proportion of lap-sash belts fitted to occupied seats observed.

(2) Proportion of lap-sash belts used, where fitted.

(3) Overall seat belt wearing rate (Number of occupants restrained/Total number of occupants observed).

Separate data shown for driver and left hand front seat passenger, and for Melbourne metropolitan and Victorian rural regions.

(B) D.C. ANDREASSEN (1972). 'The Effects of Compulsory Seat Belt Wearing Legislation in Victoria'

Proceedings of the National Road Safety Symposium, Canberra, 1972.

The data contained in this paper are a sub-set of the data described in part (A) above.

Record 2.305 VEHICLES IN USE - Victoria

Journey to Work Patterns: Melbourne 1961-71

C.A. MAHER and K. O'CONNOR

1. Source

Collector and Distributor: Faculty of Economics, Monash University, Wellington Road, Clayton, Vic. 3168.

2. Periodicity of Availability

Once-only study, published in November 1978. The data used originate from the 1961 and 1971 Census of Population and Housing.

3. Region of Availability

Melbourne metropolitan area.

4. Published Information

C.A. MAHER and K. O'CONNOR (1978). 'Journey to Work Patterns: Melbourne 1961-71'. Working Paper No. 6. Monash University.

5. Supplementary Information

Authors' working papers and internal documentation.

6. Limitations

This is a secondary source of data, based entirely on journey to work statistics collected as part of the 1961 and 1971 Census of Population and Housing.

7. Description of Data Available

The main aim of the study was to identify the main changes in the pattern of journey to work that occurred between 1961 and 1971. The Melbourne metropolitan area was divided into 8 main regions, and the spatial distribution of work trips was analysed between regions, between Local Government Areas, and between major employment locations.

Record 2.306 VEHICLES IN USE - Victoria

Urban Passenger Travel - The Role of the Electric Car

J.W. GRAVES (1977)

1. Source

Collector: J.W. GRAVES, Department of Civil Engineering, University of Melbourne, Parkville, Vic. 3052.

Distributor: Bureau of Transport Economics, Civic Permanent Centre, Allara Street, Canberra, ACT 2600.

2. Periodicity of Availability

Once-only study conducted in 1976.

3. Region of Availability

The vehicle usage data are limited to a sample of ten municipalities in the Melbourne metropolitan area.

4. Published Information

J.W. GRAVES (1977). 'Urban Passenger Travel - The Role of the Electric Car'. Bureau of Transport Economics, Occasional Paper No. 12.

5. Supplementary Information

Author's working papers and internal documentation.

6. Limitations

The aim of the study was to show that battery operated electric cars could be a viable alternative for cars with internal combustion engines. To provide supporting evidence, a sample of 1,005 households was surveyed, seeking information on vehicle usage. The survey yielded 679 usable responses. Ten Melbourne municipalities were included: Doncaster and Templestowe, Fitzroy, Footscray, Frankston, Keilor, Kew, Knox, Lilydale, Oakleigh and Preston.

7. Description of Data Available

- (1) Household characteristics: number of vehicles, number of persons, average gross income, number of workers, number of licensed drivers per household.
- (2) Average annual kilometres travelled by first, second and third car in the same household. Data for first and second car are segmented by household gross income.
- (3) Average annual kilometres travelled by age of car (0-1, 1, 2, ... more than 15 years old).
- (4) Average annual kilometres travelled by trip purpose (e.g. travel to work, personal business, etc.).
- (5) Average annual kilometres travelled by occupation of principal driver (e.g. professional/administrative, clerical, etc.).
- (6) Average annual kilometres travelled by age of principal driver (18-19, 20-24, 25-29, 30-64, 65 and over).

Record 2.306 (Sheet 2)

- (7) Average number of daily trips per household by household size (1, 2, . . . 6 or more persons per household who are 5 years or older) by number of vehicles used per household (0, 1, 2 or more).
- (8) Average number of daily trips per household by household size (same categories as for item (7) above), by gross household income (up to \$6,850; \$6,851-10,000; \$10,001-14,250; \$14,250 per *annum* and over).
- (9) Frequency distribution of number of cars in the sample according to usual distance travelled per weekday (0, 1-10, 11-20, . . . 101 km or more), by average annual kilometres travelled (0-5,000; 5,001-10,000; . . . 50,000 km or more).
- (10) Additional data aimed at establishing the proportion of households with car usage characteristics compatible with the performance of currently available electric cars (travelling more than 80 km per day on fewer than 12 occasions per year).

Record 2.401 VEHICLES IN USE - Queensland

Brisbane Bus Services

1. Source

Collector and Distributor: Transport Department, Brisbane City Council, 69 Ann Street, Brisbane, Qld. 4000.

2. Periodicity of Availability

Annual Report: annual; bus time-tables: continually updated; bus route map: irregular.

3. Region of Availability

Brisbane metropolitan area.

4. Published Information

- (1) Annual Report.
- (2) Bus time-tables.
- (3) Public Transport Pocket Map.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Using the time-tables, it would be possible to determine the theoretical number of buses passing a given point within the bus route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, and so on).

7. Description of Data Available

(A) Annual Report

- (1) Number of passengers carried during the year.
- (2) Vehicle kilometres travelled during the year.
- (3) Number of buses in use.
- (4) Total route kilometres of the system.
- (5) Cost of fuel per bus kilometre.
- (6) Average number of passengers per kilometre travelled.
- (7) A summary of recent survey data: number of typical weekday bus passengers entering the Brisbane central business district between 7 and 9 am, number of buses and average bus loads on these trips. Number of cars entering the area at that time, and average car occupancy.

(B) Bus Time-Tables

A series of booklets, each describing the route and showing the arrival and departure times at a number of key bus stops along the route. Separate data are provided for weekdays, Saturdays, Sundays and public holidays.

Record 2.401 (Sheet 2)

(C) Public Transport Pocket Map

This publication is issued by the Metropolitan Transit Authority which is part of the State Department of Transport. The map shows the Brisbane metropolitan region, indicating the location of bus routes maintained by the Brisbane City Council, and those of private bus operators. A listing of all bus routes, both by route number and route name is also included, together with information on other public transport modes (trains and ferries).

Record 2.402 VEHICLES IN USE - Queensland

Characteristics of Road Travel in Queensland 1973

K. LEITCH, G. MIDDLETON and L. MUDGE

1. Source

Collector: Department of Main Roads, Boundary Street, Spring Hill, Qld. 4000. (The authors were on the Department's staff).
Distributor: Australian Road Research Board, 500 Burwood Road, Vermont South, Vic. 3133.

2. Periodicity of Availability

Once-only study using data of a survey conducted in 1973. A similar survey was conducted in 1963.

3. Region of Availability
Queensland.

4. Published Information

K. LEITCH, G. MIDDLETON and L. MUDGE (1976). 'Characteristics of Road Travel in Queensland 1973'. ARRB Proceedings, Vol. 8, p. 15-22.

5. Supplementary Information

Authors' working papers and internal documentation.

6. Limitations

The data are based on a sample survey of 36,134 motorists whose vehicles were registered in Queensland during 1973. The survey was conducted by sending a questionnaire to sampled vehicle Owners together with their vehicle registration renewal notices. The questionnaire requested owners to supply details of actual trips made in a specified period. A number of limitations necessarily arise from the survey method employed. Amongst these are: exclusion of vehicles not registered in the State, any significant differences between respondents and non-respondents, and problems associated with expansion of daily mileages into annual figures. Care was taken to take into account vehicles with special characteristics (e.g. vehicles in used car lots, etc.).

7. Description of Data Available

For survey purposes, the State was divided into 6 regions: Brisbane, Provincial Urban, South-East, Central-East, North-East, Western.

- (1) Daily usage of vehicles available: percentage of all vehicles available used on an average day by period (Monday-Friday, whole week), by geographic region, by type of vehicle (class 1: cars and station wagons, class 2: light trucks below 1 ton load capacity, class 3: heavy trucks of more than 1 ton load capacity).
- (2) Average daily vehicle mileage by region, by period (Monday-Friday, whole week). From this, average annual mileage per vehicle on register was calculated.

Record 2.402 (Sheet 2)

- (3) Graphs of vehicle usage (percentage of vehicles available being used on an average day), and average daily mileage plotted against year of vehicle manufacture. Separate graphs for cars and heavy trucks, for regions A and F, and State averages.
- (4) Average trip mileage by trip purpose (work/business, education, shopping, social, recreation/pleasure, other), by type of vehicle (cars and station sedans, all vehicles).
- (5) Trip length frequency distribution (under 6 miles, 6-10, 11-15, 16-20, 21-30, 51-100, over 100 miles) for the 3 vehicle classes, shown in tabular and graphical form.
- (6) Percentage of total mileage travelled by trip mileage in the same categories as for (5) above.
- (7) Percentage of total mileage travelled by driver age (under 20, 20-24, 25-29, 30-39, 40-49, 50-59, 60+), by sex.
- (8) Percentage of total mileage travelled by number of vehicle occupants (for passenger vehicles only: 1, 2, 3, 4, 5-6, over 6 occupants), for regions A and F, and State averages.
- (9) Percentage of total mileage travelled by trip purpose in the same categories as for (4) above, by sex.
- (10) Percentage of total mileage travelled by occupation (in 14 occupational groupings: professional, administrative/clerical, etc.), by sex.
- (11) State average daily vehicle mileage travelled, by sex.

Record 2.501 VEHICLES IN USE - South Australia

Adelaide Bus and Tram Services

1. Source

Collector and Distributor: State Transport Authority, Railway Building, North Terrace, Adelaide, SA 5000.

2. Periodicity of Availability

Annual Report: annual; bus time-tables: continually updated; bus route map: irregular; Vehicles in Traffic Statistics: continually updated.

3. Region of Availability

Adelaide metropolitan area.

4. Published Information

- (1) Annual Report.
- (2) BUS time-tables.
- (3) Public Transport Map.

5. supplementary Information

Vehicles in Traffic Statistics (internal document). Other internal documentation and working papers.

6. Limitations

using the time-tables, it would be possible to determine the theoretical number of buses passing a given point within the bus route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, and so on).

7. Description of Data Available

(A) Vehicles in Traffic Statistics

This is an internal report, consisting of handwritten summary sheets and charts, commonly referred to as 'VIT Statistics'. For each half-hour period throughout the day, the number of buses used in traffic are shown by depot, by route, and by type of bus. Separate summaries are included for weekdays, Saturdays, Sundays and public holidays.

(B) Annual Report

- (1) Total route kilometres.
- (2) Number of passengers carried during the year.
- (3) Total vehicle kilometres travelled during the year.
- (4) Average number of passengers carried per vehicle kilometre. (Vehicle kilometres are shown as 'traffic kilometres').

Record 2.501 (Sheet 2)

- (5) Number of buses by type (petrol, diesel, coaches), by make and model, showing the fleet of buses transferred from private owners to the State Transport Authority as a separate group. (The Authority took over some 12 independent private bus operators in the Adelaide metropolitan area, which had experienced financial difficulties, since 1974). Also shown is the number of tramcars used on the only remaining tram line connecting the central business district to Glenelg Beach.
- (6) Number of licences granted to private bus companies (operating mainly outside the Adelaide area), and taxi licences by type of licence (regular passenger services, regular tourist services, special tourist services, limited radius services, charter services, taxis and hire cars, workmen and school children services, interstate services, miscellaneous bus services). For some categories, data are available for the last five years.
- (7) Number of passengers carried and kilometres travelled by licensed route bus service operators, showing data for the last five years.
- (8) A statistical summary, showing annual data since 1938, for the bus and tram division: number of passengers carried, total population of the Adelaide metropolitan area, average number of passengers per vehicle kilometre, total vehicle kilometres, total number of vehicles in stock at the end of the year by type of vehicle (trams, trolley buses, motor buses), total kilometres of route in the system by type of route (single tram track, double tram track, total tram track, trolley bus route, motor bus route).
- (9) List of private carrier bus routes operating under licence issued by the State Transport Authority, showing the route (e.g. between Adelaide and Loxton via Swan Ridge), and the name of the licensee.

(C) Bus Time-Tables

A series of booklets, each showing a schematic diagram of the route and the arrival and departure times at a number of key bus stops along the route. Separate data are shown for weekdays, Saturdays, Sundays and public holidays.

(D) Public Transport Map

The map shows the Adelaide metropolitan region, indicating the location and route numbers of all scheduled bus and tram services. A colour code is used to distinguish between city-bound (i.e. radial) services, cross-suburban services, and rail feeder services. A listing of all bus routes, arranged in order of route number, is also included together with a brief description of the route, setting out the main roads along the route. Suburban passenger rail services are also listed.

Record 2.502 VEHICLES IN USE - South Australia

Metropolitan Adelaide Public Transport Patronage Study

1. Source
Collector: A.M. Vorhees & Partners Pty. Ltd., 6 Greenhill Road, Wayville, SA 5034.
2. Periodicity of Availability
Once-only study, conducted in 1978.
3. Region of Availability
Adelaide metropolitan area.
4. Published Information
'Metropolitan Adelaide Public Transport Patronage Study', comprising 17 volumes, as described in Paragraph 7 below.
5. Supplementary Information
Internal documentation and working papers.
6. Limitations
Not known.
7. Description of Data Available
The study was a comprehensive analysis of passenger movements within the Adelaide public transport system. Of the 17 volumes, 4 deal specifically with bus services, and 13 with train and tram services. For the sake of completeness, all 17 are listed below.

BUS Survey

- volume 1 Summary Report.
- 2 Radial Bus City cordon Maximum Loadings Report.
 - 3 Radial Bus Suburban Maximum Loadings Report.
 - 4 Rail Feeder Bus Report.

Train and Tram Surveys

- Volume 1 Summary Report.
- 2 Noarlunga Centre Line, Train Report.
 - 3 Noarlunga Centre Line, Station Report.
 - 4 Outer Harbour Line, Train Report.
 - 5 Outer Harbour Line, Station Report.
 - 6 North Gawler Line, Train Report.
 - 7 North Gawler Line, Station Report.
 - 8 Bridgewater Line, Train Report.
 - 9 Bridgewater Line, Station Report.
 - 10 Adelaide Railway Station Barrier Counts.
 - 11 Glenelg Tram Line, Tram Report.
 - 12 Glenelg Tram Line, Stop Report.
 - 13 Glenelg Tram Barrier Counts.

Record 2.503 VEHICLES IN USE - South Australia

Seat Belt Surveys: Road Traffic Board

1. Source

Collector and Distributor: Road Traffic Board, 33-37 Warwick Street, Walkerville, SA 5081.

2. Periodicity of Availability

Annual, since 1968.

3. Region of Availability

South Australia.

4. Published Information

The results of the annual seat belt survey are contained in the annual booklet 'Road Traffic Accidents', published by the Road Traffic Board.

5. supplementary Information

Internal documentation and working papers.

6. Limitations

Not known.

7. Description of Data Available

The 1977 edition of 'Road Traffic Accidents' lists data for the ten year period 1968-77. For each year, the following information is shown:

- (1) Number of vehicles inspected, total number of vehicle occupants in the sample, and average vehicle occupancy.
- (2) Number and percentage of vehicles fitted with seat belts.
- (3) Percentage of all vehicles inspected, in which the driver's seat was fitted with a seat belt, and percentage of those vehicles where the driver was wearing a seat belt. Percentage of all drivers in the sample wearing a seat belt.
- (4) Percentage of passengers who had a seat belt available, and percentage of those using a seat belt. Percentage of total sample of passengers observed wearing a seat belt.
- (5) Same as (4) but for total vehicle occupants.

Record 2.601 VEHICLES IN USE - Western Australia

Perth Bus Services

1. Source

collector and Distributor: Metropolitan Passenger Transport Trust,
10 Adelaide Terrace, Perth, WA 6000.

2. Periodicity of Availability

Annual Report: annual; Financial Report: every 4 weeks; Vehicles in
Traffic Statistics: irregular; bus time-tables: continually updated;
bus route map: irregular.

3. Region of Availability

Perth metropolitan area.

4. Published Information

- (1) Annual Report.
- (2) Bus time-tables.
- (3) Perth Public Transport Route Map.

5. Supplementary Information

- (1) Financial Report (internal document).
 - (2) Vehicles in Traffic Statistics (internal document).
- Other internal documentation and working papers.

6. Limitations

Using the time-tables, it would be possible to determine the theoretical number of buses passing a given point within the bus route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, etc.).

7. Description of Data Available

(A) Financial Report

The Financial Report is an internal report on current operations, published every 4 weeks. Separate data are listed for: the last 4 weeks, year to date, comparative data for the corresponding 'year to date' period of the previous year. All data include the total operation of the entire bus fleet used by the Trust.

- (1) Vehicle kilometres travelled.
- (2) Number of passengers carried.
- (3) Passenger kilometres travelled and other kilometres travelled ('other' meaning the distance travelled by buses when not carrying any passengers).
- (4) Fuel consumption for vehicles using distillate: average fuel consumption rate in km per 100 litres of fuel, and total fuel used (litres) during the period.

Record 2.601 (Sheet 2)

(B) Vehicles in Traffic Statistics

This report is an internal document produced from time to time for the purpose of providing data for negotiations with trade unions, and for Arbitration Commission proceedings.

The data shown are the scheduled number of buses in traffic during certain time intervals (2-4am, 4-5am, 5-6am, ...at hourly intervals to 1-2am) in the Perth metropolitan region. In many instances, interstate comparisons are made with other metropolitan regions or representative bus depot operations.

Seasonal variations are not indicated. It is not known to what extent the time periods on which the data are based in various cities differ.

(C) Annual Report

A few supplementary items of information are also contained in the Annual Report.

(D) BUS Time-Tables

Each time-table booklet shows bus movements on weekdays, Saturdays, Sundays and public holidays. In each case the location, route number and the main roads on the route are indicated, together with a route diagram.

The map shows the location of all bus routes in the Perth metropolitan area, and a guide showing which route number to select to reach a given locality.

Record 2.701 VEHICLES IN USE - Tasmania

Hobart Bus Services

1. Source

Collector and Distributor: Metropolitan Transport Trust, 49 Macquarie Street, Hobart, Tas. 7000.

2. Periodicity of Availability

Annual Report: annual; bus time-tables: continually updated; bus route map: irregular.

3. Region of Availability

Metropolitan areas of Hobart, Launceston and Burnie.

4. Published Information

- (1) Annual Report.
- (2) Bus time-tables.
- (3) Bus route maps.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Using the time-tables, it would be possible to determine the theoretical number of buses passing a given point within the bus route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, etc.).

7. Description of Data Available

(A) Annual Report

- (1) Route kilometres by region (Hobart, Launceston, Burnie), annual data since 1955-56.
- (2) Number of buses in operation and average annual kilometres travelled per bus, by type of bus (e.g. Bedford SB petrol front engine manual, etc.), by region (Hobart Western Shore, Hobart Eastern Shore, Launceston, Burnie), for specified time periods (e.g. 1964-71).
- (3) Total vehicle kilometres travelled by region (Hobart, Launceston, Burnie), annual data since 1955-56.
- (4) Total number of passengers carried by region (Hobart, Launceston, Burnie), annual data since 1955-56.

(B) BUS Time-Tables

For Hobart, a booklet has been published in January 1978, containing all time-tables and a route map. For each route, the locality is indicated (e.g. Route 8 - Lenah Valley via Girrabong Road), and departure times are shown for each route starting point. Separate tables are given for weekdays, Saturdays/public holidays, and Sundays. In some cases, a separate table is also shown for Fridays. For routes starting in the city, the location of the departure point is also listed (e.g. Myers Murray Street, etc.).

Reocrd 2.701 (Sheet 2)

(C) mute Map for Hobart

The map shows the location of all bus routes in the Hobart metropolitan area. Also included is a listing of all routes showing the streets along each route, a description and detailed map of city departure points, and a guide showing which route number to select to reach a given locality.

Record 2.702 VEHICLES IN USE - Tasmania

Vehicle Usage Surveys: The Transport Commission

1. Source
Collector and Distributor: The Transport Commission, 1 Collins Street, Hobart, Tas. 7000.
2. Periodicity of Availability
1976, 1977, 1978.
3. Region of Availability
Tasmania.
4. Published Information
None.
5. Supplementary Information
Annual Speed Survey (internal report).
6. Limitations
A number of limitations arise from the survey methodology used, which is described in paragraph 7 below.
7. Description of Data Available
 - (A) Annual Speed Survey
The 1978 survey was conducted at 7 locations on unrestricted two-lane highways. At each location, traffic was observed on four occasions (weekday: day-time, night-time; Saturday: day-time, night-time). A total of 21,280 vehicle speeds were recorded. Previous surveys followed a similar pattern.
 - (1) Average speed of vehicles observed in two categories: 'free speed' (vehicles with headways greater than four seconds) and 'all speeds' (all vehicles observed). Also shown are the upper 85th percentiles and standard deviations of vehicle speeds for each category. The percentage of all vehicles which exceeded the speed limit of 110 km/h is also indicated for each sub-group.
 - (2) Sample sizes and traffic volumes (vehicles per hour) for each vehicle category.
 - (3) Proportion of free speed vehicles to total vehicles in each category.
 - (4) For each of the data items described in (1), (2) and (3) above, comparative data for 1976 and 1977.
 - (5) Peak period data, taken at one location in 1978 on a weekday, both for the morning and afternoon peak periods.
 - (6) Comparative data for NSW, Victoria, Queensland and South Australia, showing average speeds and the upper 85th percentiles for three types of vehicles: cars and car derivatives, rigid trucks, articulated trucks.
 - (B) Motor Cycle Survey
This survey is described in part (A) of Record 2.703.

Record 2.70 (3) VEHICLES IN USE - Tasmania

Seat Belt Surveys: The Transport Commission

1. Source

Collector and Distributor: The Transport Commission, 1 Collins Street, Hobart, Tas. 7000.

2. Periodicity of Availability

Irregular. Seat Belt and Motor Cycle Survey was conducted in 1976, 1977 and 1978. Child Restraint Usage Survey was conducted in 1978.

3. Region of Availability

Hobart metropolitan area and environs.

4. Published Information

None.

5. Supplementary Information

Internal reports:

- (1) Seat Belt and Motor Cycle Survey.
- (2) Child Restraint Usage Survey.

6. Limitations

A number of limitations arise from the survey methodology used, which is described in paragraph 7 below.

7. Description of Data Available

(A) Seat Belt and Motor Cycle Survey

In the 1978 seat belt survey, a total of over 8,000 cars or car derivatives were observed at 3 locations which represented three different types of traffic: commuting, shopping, weekend/recreational. The total observation period was 19 hours. Only drivers and front seat passengers were included in the survey.

The motor cycle surveys were based on small samples: (1976: 123; 1977: 125; 1978: 59 motor cycles).

All observations were made in day time. The 1978 survey report contains the following information:

Seat Belt Data:

- (1) Number of cars observed and percentage of cars not fitted with seat belts, by type of traffic (commuting, shopping, weekend).
- (2) Percentage of drivers and front seat passengers wearing seat belts (in cars fitted with seat belts), by type of traffic (commuting, shopping, weekend).
- (3) Percentage of drivers and front seat passengers wearing seat belts (in all cars observed), by type of traffic (commuting, shopping, weekend).

Record 2.703 (Sheet 2)

- (4) Comparative data for 1976, 1977 and 1978 in the same categories as for items (1), (2) and (3) above. For commuter traffic, separate data are available for the morning and afternoon peak period, except for 1978 where data on afternoon peak period are omitted.
- (5) Comparative data showing the percentage of cars fitted with seat belts, and seat belt wearing rates (for cars fitted with seat belts), for drivers and front seat passengers, for Melbourne, rural Victoria, Canberra and Hobart. (These are described in Record 2.109).

Motor Cycle Data:

- (6) Number of motor cycle occupants observed, and percentage of occupants wearing a safety helmet, for each year since 1976.
- (7) Number of motor cycles observed, and percentage of motor cycles driven with their headlights switched on, for each year since 1976.

(B) Child Restraint Usage Survey

In the 1978 survey, a total of 869 children were observed at three locations, representing three different types of traffic (shopping strip, regional shopping centre, at a primary school). The total observation period was 6 hours. All observations were made in daytime.

Only cars and car derivatives were included in the survey. Observations were limited to children up to the age of about 10 years. For several of the sub-groupings, the actual sample sizes were quite small.

- (1) Number of children observed, percentage of children unrestrained (seated, other), and restrained (safety seat, other seat, seat belt). Separate data by location within the vehicle (front seat, back seat), and by type of traffic (shopping strip, shopping centre, primary school). Also shown is the percentage of children observed who were in the front seat, and the average child occupancy per car for each of the three types of traffic.
- (2) Number of unrestrained children and their percentage distribution by front/back seat, by type of traffic, by child occupancy (one child, two or more children per vehicle).
- (3) Number of unrestrained children observed, and percentage of these sitting on adult lap, by front/back seat, by type of traffic.
- (4) Comparative data showing results of this survey and those of similar surveys conducted in Canberra, Melbourne and Sydney. (These are described in Record 2.109).

Record 2.704 VEHICLES IN USE - Tasmania

Visitor Survey - Tasmania

1. Source

Collector and Distributor:

- (1) Department of Tourism, 1 Franklin Wharf, Hobart, Tas. 7000.
- (2) Australian Bureau of Statistics, Hobart Office,
188 Collins Street, Hobart, Tas. 7000.

2. Periodicity of Availability

Once-only study, conducted during 1978.

3. Region of Availability

Tasmania.

4. Published Information

ABS Ref.No. 3401.6. 'Visitor Survey - Preliminary Results for the Year Ended 31 December 1978'. A final report containing more detailed information is being prepared.

5. Supplementary Information

Computer printouts of over 100 tabulations, held by the Department of Tourism. In addition, more detailed information could be retrieved from data held on magnetic tape, that could be made available by the Hobart office of the Australian Bureau of Statistics.

6. Limitations

The survey comprised 8,015 'contact interviews' with non-Tasmanian residents about to depart from Tasmania. Each departing visitor was handed a questionnaire. A total of 6,194 usable questionnaires were obtained during the survey which was conducted for a period of 12 months.

The survey was limited to persons 15 years of age and older; all of these are referred to as 'adult visitors'.

7. Description of Data Available

The data shown are the estimated total number of visitors for the 12 month survey period. In some cases, quarterly data are also available.

- (1) Number of visitors by travel mode and port of arrival (air: Hobart, Devonport, Wynyard; sea: Devonport, Other).
- (2) Number of visitors by travel mode and port of departure (air: Hobart, Launceston, Devonport, Wynyard; sea: Devonport).
- (3) Number of nights spent by visitors in Tasmania by region (Hobart, other South, East Coast, Launceston, North East, North West, ~~West~~ Coast, by travel mode and port of arrival, same categories as for (1) above.
- (4) Number of visitors by predominant means of transport used while in Tasmania (own motor vehicle or motor cycle, hired car, hired motorised camper, organised coach tour, friends or relatives drove or supplied car, public transport including taxis, walking or hitchhiking, other), by average daily distance travelled using that means of transport (1-25, 26-50, ... 300-400, 401 or more kilometres).

Record 2.704 (Sheet 2)

- (5) Number of nights spent by visitors in Tasmania by type of accommodation (hotel/motel/guest house with facilities, holiday unit, etc.) by predominant means of transport used while in Tasmania, same categories as for (4) above.

A great deal of additional, more detailed information is available from the computer printouts held by the Department of Tourism. For example, twenty respondents stated that their main means of transport whilst in Tasmania was a bicycle.

Record 2.705 VEHICLES IN USE - Tasmania

Growth and Development Of Tasmania's Energy System

M.J. HARTLEY, R. JONES, and R.L. BADCOCK

1. source

Collector and Distributor: Board of Environmental Studies,
University of Tasmania, Sandy Bay, Tas. 7005.

2. Periodicity of Availability

Once-only study, conducted in 1978.

3. Region of Availability

Tasmania.

4. Published Information

M.J. HARTLEY, R. JONES and R.L. BADCOCK (1978). 'Growth and Development of Tasmania's Energy System - A Statistical Analysis of Supply and Demand 1950-1975'. University of Tasmania, Environmental Studies Working Paper No. 9.

5. Supplementary Information

Authors' working papers and internal documentation.

6. Limitations

Data for the period prior to 1962 were based on aggregated statistics, and much of the information required concerning fuel usage was unavailable and had to be estimated.

7. Description of Data Available

Chapter 3 deals with energy usage in the road transport sector. The following energy units were used: GJ (gigajoule = 10^9 joule), TJ (terajoule = 10^{12} joule), PJ (petajoule = 10^{15} joule).

- (1) Total energy usage (PJ) in road transport for Tasmania for the year 1974, by transport mode (cars/station-wagons/motorcycles, commercial vehicles/trucks, buses) by type of fuel (motor spirit. automotive distillate) .
- (2) Energy used as motor spirit in Tasmania: annual data for the period 1950-51 to 1976-77: total energy used (TJ) and per capita usage (GJ) .
- (3) A comparison of per capita energy consumption as motor spirit (GJ) between Australia and Tasmania for the period 1971-72 to 1976-77.
- (4) Energy used as automotive distillate in Tasmania: annual data for the period 1950-51 to 1976-77: total energy used (TJ) and per capita usage (GJ) .

Record 2.801 VEHICLES IN USE - Northern Territory

Darwin Bus Services

1. Source

Collector and Distributor: Darwin *Bus* Service, Department of Transport and Works, PO Box 2520, Darwin, NT 5794.

2. Periodicity of Availability

Annual Report: annual; bus time-tables: continually updated; bus route map: irregular.

3. Region of Availability

Darwin and environs.

4. Published Information

- (1) Annual Report (Department of Transport and Works).
- (2) Bus time-tables.
- (3) Route map.

5. Supplementary Information

Internal documentation and working papers.

6. Limitations

Using the time-tables, it would be possible to determine the theoretical number of buses passing a given point within the bus route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, etc.).

7. Description of Data Available

(A) Annual Report

- (1) Number of passengers carried during the year.
- (2) Vehicle kilometres travelled during the year.
- (3) Number of buses in service.
- (4) Total route kilometres (unduplicated) .

(B) Bus Time-Tables

A series of booklets, each showing a schematic diagram of the route and the arrival and departure times at a number of key bus stops along the route. Separate data are shown for weekdays and Saturdays.

(C) Public Transport Map

The map shows the Darwin urban region, indicating the location and route numbers of all scheduled bus services.

Record 2.901 VEHICLES IN USE - Australian Capital Territory

Canberra Bus Service

1. Source

Collector and Distributor: Australian Capital Territory Internal Omnibus Network (ACTION), Transport Branch, Department of the Capital Territory, Akuna House, Akuna Street, Canberra, ACT 2600.

2. Periodicity of Availability

Annual Report: annual; bus time-tables: continually updated; bus route map: irregular.

3. Region of Availability

Canberra metropolitan region, and bus routes to Queanbeyan and Yass in New South Wales.

4. Published Information

- (1) Annual Report (Department of the Capital Territory).
- (2) Bus time-tables.
- (3) ACTION Route Maps and Passenger Information.

5. supplementary Information

A set of internal statistics, operating summaries and reports, described in paragraph 7 below.

6. Limitations

using the time-tables, it would be possible to determine the theoretical number of buses passing a given point within the bus route network during a specified time interval. The result so obtained would, however, not take into account any buses operated by a number of other carriers (private bus lines, airline coaches, defence services buses, etc.).

7. Description of Data Available

(A) Annual Report

- (1) Number of buses in service at June 30.
- (2) Total kilometres travelled by the entire bus fleet during the year.
- (3) Number of bus routes in operation, including peak period and off-peak supplementary routes.
- (4) Total length of the bus network at June 30.
- (5) Estimated number of passenger journeys during the year.

(B) Bus Time-Tables

These consist of a series of leaflets, each showing bus travel information for a given route or group of routes: arrival and departure times at the terminus or interchange, and at some major bus stops along the route. Separate tables are shown for weekdays, Saturdays and Sundays/public holidays. In many cases, route diagrams are also included.

Record 2.901 (Sheet 2)

(C) ACTION Route Maps and Passenger Information

The map shows the location of all bus routes, using a colour code to indicate inter-town routes (Woden-City-Belconnen), inter-suburban routes, suburban feeder routes, and external routes (to Queanbeyan and Yass). All route numbers are listed according to origin/destination localities, and major roads along each route are indicated.

(D) Internal Reports

The Transport Branch prepares a number monthly reports and operations summaries which include the following information:

- (1) Number of buses in the fleet.
- (2) Number of goods vehicles operated by the Transport Branch.
- (3) Number of 'special duty vehicles' which are normally hired out to other authorities, by vehicle type (e.g. police motor cycles, small passenger vans, four wheel drive vehicles, etc.).
- (4) Maximum number of buses required to operate the scheduled bus services during the peak usage period (3.00-3.45pm).
- (5) Number of bus routes in operation.
- (6) Total length of routes in the system.
- (7) Total bus kilometres travelled during the month, by type of service (scheduled bus routes, school bus services, special bus hire, and 'dead travel' which represents the total non-revenue-producing distance travelled). The total kilometres travelled are determined by monthly odometer readings of all vehicles in the bus fleet.
- (8) Total number of bus trips on scheduled route travel during the month.
- (9) Total number of bus trips and bus kilometres travelled on scheduled routes per day for various time periods (week day, Friday night, Saturday, Sunday), separately for inbound and outbound traffic. Number of trips and kilometres during a normal week (not including any public holidays) are also shown.

Annual operations summaries:

- (10) Number of buses in the fleet at June 30, by make.
Data available for the most recent nine years.
- (11) Number of buses in the fleet by year of manufacture, by make and model.
- (12) Annual operations summary, showing the length of the bus network, number of routes, total bus kilometres travelled, maximum number of buses used during the peak usage period, number of passenger trips, and number of buses in the fleet.