

REPORT OF THE

AUDIT OFFICE

MINISTRY OF TRANSPORT:
ROAD TRANSPORT DIVISION



**THE
AUDIT
OFFICE**

OFFICE OF THE CONTROLLER AND AUDITOR-GENERAL,
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THE AUDIT OFFICE

**MINISTRY OF TRANSPORT:
ROAD TRANSPORT DIVISION**

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EXECUTIVE SUMMARY

A conservative estimate is that road accidents cost New Zealand in excess of \$500 million annually. In the last year, more than 760 people died and more than 19,000 were injured in road accidents. Comparison with other countries such as Australia, the United States, the United Kingdom, Canada and Sweden shows that New Zealand has a higher rate of fatalities. Furthermore, over the last 10 to 15 years New Zealand has been markedly less successful at reducing its fatality rate than those countries.

The Road Transport Division (the Division) of the Ministry of Transport (the MOT) is an integral element in the safe and efficient operation of the New Zealand road system. In 1985–86 the Division spent \$66 million, generated revenue of \$24 million and employed 1,600 people. Its main activities are road safety education, traffic enforcement, vehicle inspection, research and traffic engineering. The Division's goal is "to advance safe and efficient road use" and one of its objectives is to reduce the fatality rate from the 1985 level of 3.8 deaths per 10,000 vehicles to 3.2.

The Division has taken a number of initiatives to achieve both safe and efficient road use. The seat belt campaign, introduction of graduated licences, promotion of the Safe Play programme for young children, the new driver's test, and campaigns against alcohol-impaired driving are examples. Other initiatives, such as the establishment of a corporate planning process, management information systems, management training for line officers, and training traffic officers to handle hostile situations, have improved its operations.

During the audit we were impressed by the dedication, enthusiasm and competence of the field officers of the Division. Traffic officers, for example, are professionals who have a genuine interest in improving road safety. Their dedication exists in spite of the adversarial position they are often placed in and the increasing number of assaults on traffic officers. The same level of professionalism can be found in the Division's traffic instructors and automotive surveyors.

The Division has an important and worthwhile role to fulfil that impacts directly on all New Zealanders. Its efforts are constrained, however, by its resource levels and by society's right to make a trade-off between the desired level of mobility and the acceptable level of risk. The audit concluded that, although the Division is providing value for its expenditures, there are a number of areas where effectiveness and efficiency could be improved.

Research

The 12 person research group has produced a number of very valuable studies. Nevertheless, there are a number of areas where the Division would benefit from additional research and review of its key operational programmes:

- Basic research to establish what level of alcohol-impaired driving occurs in New Zealand.
- Review of the techniques and amount of resources being applied to detecting alcohol-impaired drivers. The main technique is "random stopping". Drivers are stopped at random but the traffic officer has total discretion as to which drivers are tested. New South Wales, by comparison, which uses a different technique called "random breath testing" and applies more resources, has been very successful in reducing alcohol as a factor in accidents. Given the apparent success in New South Wales, the Division should review both its approach and resource levels for detecting alcohol-impaired drivers.
- Review of the use of verbal warnings. Although verbal warnings are issued by traffic officers in 50 percent of enforcement actions, the Division cannot identify what offences receive verbal warnings and has no evidence to indicate that verbal warnings are effective in modifying motorists' behaviour.

Road Safety Education

Both the direction and the efficiency of the road safety education programme need review. The programme's direction is not clear. Many traffic instructors and teachers believe that a prime task of traffic instructors is to make classroom presentations. The branch records the time spent on this activity. On the other hand, branch management believes that traffic instructors should be resource suppliers and teachers should do the classroom presentations. Time spent on this activity is not recorded. If the branch wants traffic instructors to function as resource suppliers and teachers to do the classroom presentations, it should:

- communicate this clearly to traffic instructors and teachers
- develop a strategy and approach on the best way to successfully implement this activity
- measure the time and effort spent on this type of activity.

The programme is not operating efficiently. Traffic instructors, for example, spend 20 percent of their time teaching while 44 percent of their time is spent on lesson preparation, principal/teacher discussion, administration, training and self development. More time would be available for classroom presentations or for providing resources to teachers if the Division:

- prepared standard lessons rather than the present system where traffic instructors spend a significant portion of their time developing their own lessons
- established a formal need for road safety education directly with the Department of Education. Presently, because it is not mandatory in school syllabi, traffic instructors spend time contacting individual teachers and selling the need for classroom time.
- reduced administration and self training time.

Any additional time gained could be used to expand the Division's coverage of school classes which is less than 40 percent for pre-school classes and less than 70 percent for primary school classes.

One aspect of the programme that is functioning well is the school patrol. The accident rate is about 5 per year and using student volunteers rather than paid adult supervision is very cost effective.

Traffic Enforcement

Traffic enforcement is the largest branch and uses about 70 percent of the Division's resources. It has a wide range of activities such as road patrol, traffic management, driver testing, attendance at accidents and assistance to the public. The branch appears to function reasonably well. There are, however, some minor areas that require review:

- Establishing the effectiveness of using verbal warnings as a means of influencing driver behaviour (as discussed under Research above).
- Establishing the relative benefits of specific versus general enforcement. Patrol can be either specific (such as using radar and stopping speeding vehicles) or general (where the emphasis is on high visibility in the belief that this will influence driver behaviour). The majority of patrol time is spent on general enforcement. The Division needs to determine whether this type of patrol is having the desired effect.
- Establishing the best match of patrol time to high accident risk and high traffic density times. Analysis suggests an overemphasis on patrol between the hours of 10 a.m. and 4 p.m. on weekdays while evening and weekend hours appear to be understaffed. The Division needs to review the terms and conditions of employment that limit traffic officers to spending 32 percent of their time on weekends or week nights.
- Ensuring the branch has the best equipment available. The branch needs to review its mix of motor cycles and cars and assess what is the best equipment for speed detection.

Vehicle Registration and Driver Licensing

Two vehicle registration systems and one system for driver licensing are in operation. One of the vehicle registration systems is maintained by the MOT on the Wanganui computer and the other by the Post Office on its Palmerston North computer. The estimated annual costs of operating the vehicle registration systems are \$2.5 million for the MOT and \$6.5 million for the Post Office. There are potential savings from amalgamation of these two systems.

One in nine traffic summonses cannot be served. Inaccurate information on the vehicle registration and driver licensing systems and the fact that they are not cross-referenced contribute to offenders not being located. Problems arise in establishing both the identity of an offender and the accuracy of the address given.

Vehicle Safety

The Warrant of Fitness (WOF) programme costs vehicle owners in excess of \$20 million annually in fees and at least that much in lost personal time taking vehicles for inspection. The programme does not ensure all vehicles are maintained to a safe standard and that defects, if identified, are rectified. The programme has a number of weaknesses:

- Not all vehicles are inspected within the prescribed period.
- Those that are inspected are not done to the same standard and the MOT has not been able to successfully prosecute the owners of facilities that do inadequate inspections. (In September 1986, the Government made the MOT responsible for setting and monitoring vehicle safety standards. The Division is presently implementing the new policy which will, hopefully, address the problem of maintaining the quality of inspections).
- WOF offences are often handled with verbal warnings.
- Only 2 percent of vehicles are ticketed for WOF offences, although various studies estimate that up to 23 percent may not have a valid WOF.
- The \$25 standard fine for WOF offences provides little incentive to maintain vehicles to a safe standard.
- In those cases where an offender is fined, there is still no requirement for the individual to rectify the defect.

The Certificate of Fitness programme, which is aimed at buses and heavy goods, rental and service vehicles, is, in contrast to the WOF programme, working well.

THE DIVISION'S RESPONSE TO THE EXECUTIVE SUMMARY

The Road Transport Division recognises the value in having its operation reviewed by an independent source, and it is grateful for the positive style of the final report and to note that it is providing value for expenditures.

The Division proposes to commit resources immediately to actioning the specific recommendations included in the report. In some areas, such action is already under way.

It is not proposed to comment in detail on the Executive Summary as specific management comments will appear later in the report against the appropriate recommendations and commentaries. However, it is worth noting that the Division has been responsible for the development of traffic management and traffic safety policies for 50 years. As a result it has gained a wealth of knowledge and experience both from the operation of programmes within New Zealand and from keeping in close touch with overseas practices.

No country, least of all New Zealand, accepts its road casualty record as satisfactory. That is why the Division has a goal to reduce fatal road accidents to a level closer to the record of the safest country.

That we have lost some ground over the past 20 years against the six safest countries can be at least partially explained.

Some of the countries against which we are compared had particularly bad safety records so they had plenty of scope to improve over the last 20 years. New Zealand has the lowest driving age and a very high proportion of motorcyclists, but of perhaps greater importance we have made significantly less progress than other countries with motorway and divided highway construction. Such roads have been proven to have an accident rate one-quarter to one-half that of normal roads and, had we made equivalent progress to the other countries in providing motorways, we could have expected a greater improvement in safety.

The safest countries all operate similar road accident prevention programmes. Any variation is noticeable in the emphasis placed on individual programmes rather than in the range of measures available.

Finally, the Division is required to work within the limits of its allocated resources and this involves making priority decisions and at times very hard decisions to forgo programmes that would lead to improvements. For the past 12 months the Ministry's Economic Research Branch has been undertaking a major cost/benefit analysis of a wide range of safety programmes to assist us to better allocate resources.

INTRODUCTION

Audit Scope

101 As part of its mandate the Audit Office may make such examination as it considers necessary in order to ascertain whether, in its opinion, resources of the Crown have been applied effectively and efficiently in a manner consistent with the applicable policy of the Government.

102 This audit examined the effectiveness and efficiency of the key operations of the Road Transport Division of the Ministry of Transport. Structural questions such as merging Traffic Engineering with the National Roads Board or merging Traffic Enforcement with Police were not considered.

Report Structure

103 Section 2 of this report provides a perspective on road accidents together with tables providing statistics for comparison with other countries. Section 3 briefly describes the key activities of the Division and examines their role in achieving the overall goal. The remaining sections of the report discuss and comment on the key features noted during the examination of the major operating branches, and include specific recommendations arising from the audit together with the response of the Division to those recommendations.

ENVIRONMENT

201 In 1985 New Zealand road accidents resulted in 747 fatalities and injuries to 19,161 people. A 1986 National Roads Board study estimated that each fatality had an associated cost of \$158,000 while each serious injury cost \$19,000. The study estimated that the annual cost of road accidents exceeded \$500 million. Even this may be a conservative estimate since a similar study in Australia valued the cost of fatalities and injuries at A\$300,000 and A\$52,000, respectively.

202 While the Division is a significant contributor to the achieved level of road safety, other agencies such as roading authorities also play a significant role. Improvements in vehicle safety standards and road construction have each played a significant part in reducing the severity of accidents. Improvements in medical treatment have also helped reduce the number of road deaths. In spite of these improvements, the level of road fatalities has continued to increase. The Division considers it can play a leading role in reducing the number of fatalities from the current 3.8 to no more than 3.2 deaths per 10,000 vehicles by influencing road user behaviour, improving vehicle safety standards and, where appropriate, promoting improvement in road design.

203 New Zealand has a high level of motor vehicle use. While no two countries are identical, it is worthwhile to make comparison with six other countries which have good safety records. A comparison is best based on fatalities, as injury statistics are less satisfactory due to a wide range of definitions of what comprises an injury.

204 The classes of road user involved in fatal accidents are shown in Figure 2.1. There were 667 fatal accidents during 1985 in which 747 persons lost their lives, an increase of 11.8 percent in comparison with 1984. The road toll for 1986 increased to 767.

FIGURE 2.1
ROAD FATALITIES

				<i>Year</i>				
<i>Class of Road User</i>				<i>1965</i>	<i>1975</i>	<i>1984</i>	<i>1985</i>	<i>1986</i>
Occupants of motor vehicles	..			351	400	392	471	502
Motorcyclists, power cyclists								
and pillion riders	..	..		42	96	125	131	127
Pedal Cyclists	..	..	..	33	18	31	21	22
Pedestrians	..	..	..	123	112	119	123	112
Other Road Users and								
Unknown	..	..	..	10	2	1	1	4
TOTALS	..	..	..	<u>559</u>	<u>628</u>	<u>668</u>	<u>747</u>	<u>767</u>

205 Figures 2.2 to 2.5 compare New Zealand fatality statistics with those for a number of comparable countries. In 1965 New Zealand was among the three safest of these countries. However, by the mid-1980s it was in sixth position. Over that time New Zealand has undertaken less motorway construction and been slower in implementing vehicle safety standards at point of manufacture. This suggests there is still scope to achieve a significant reduction in the road toll. The Division shares this view.

FIGURE 2.2

FATALITIES PER 100 MILLION VEHICLE KILOMETRES TRAVELLED

This statistic provides the most accurate reflection of the exposure to fatalities occurring.

			WEST						
			NZ**	AUST	USA	UK	CANADA	SWEDEN	GERMANY
1965	..	..	3.9	6.6	3.3	4.9	5.2	NA	NA
1970	..	..	3.7	4.7	2.9	3.6	4.0	4.1	8.2
1975	..	..	2.9	3.8	2.1	2.6	3.5	3.0	5.3
1980	..	..	2.6	2.9	2.1	2.1	2.7	2.1	3.8
1981	..	..	2.9	2.8	2.0	2.1	2.7	1.9	3.6
1982	..	..	2.8	2.6	1.7	2.3	2.3	1.8	3.4
1983	..	..	2.6	2.4	1.6	2.1	2.3	1.8	3.4
1984	..	..	2.5	NA	NA	NA	NA	NA	NA
1985	..	..	2.7	NA	NA	NA	NA	NA	NA
Reduction effected									
over 18 year period to									
1983	..	..	33%	63%	51%	57%	55%	56%*	58%*

* Over 13 years 1970-83

NA: Not available

** Revised figures from Report No 131: *Energy Use in Transport Data Report* by New Zealand Energy Research and Development Committee, June 1986.

Source: Federal Transport Department, Australia, 1985-86 Crash Statistics.

FIGURE 2.3

FATALITIES PER 100,000 PEOPLE

This statistic shows the relative risk in terms of the total population.

			WEST						
			NZ	AUST	USA	UK	CANADA	SWEDEN	GERMANY
1965	..	..	21.0	27.8	24.3	15.1	24.5	NA	NA
1970	..	..	22.9	30.4	25.8	13.9	23.5	16.3	31.6
1975	..	..	20.1	26.8	20.7	11.7	26.4	14.3	24.1
1980	..	..	18.8	22.3	22.6	11.2	22.5	10.2	21.2
1981	..	..	21.0	22.3	21.5	10.8	22.2	9.4	18.9
1982	..	..	20.9	21.4	18.8	10.9	16.9	9.1	18.8
1983	..	..	20.0	17.9	18.2	10.1	16.9	9.4	19.1
1984	..	..	20.2	18.2	18.7	10.1	NA	9.6	16.7
1985	..	..	23.1	NA	NA	NA	NA	NA	NA
Reduction effected									
over 19 year period to									
1984	..	..	4%	34%	23%	33%	31%	41%*	47%*

* Over 14 years 1970-84

NA: Not Available

Source: Federal Transport Department, Australia, 1985-86 Crash Statistics.

FIGURE 2.4

FATALITIES PER 10,000 VEHICLES

This is the most commonly used statistic. It uses the verifiable figure of registered vehicles rather than the estimation involved in determining vehicle kilometres travelled.

			WEST						
			NZ	AUST	USA	UK	CANADA	SWEDEN	GERMANY
1965	..	..	5.5	8.5	5.1	6.2	7.3	NA	NA
1970	..	..	5.4	8.0	4.7	5.0	6.0	5.3	11.7
1975	..	..	4.0	5.9	3.2	3.6	5.4	4.0	7.0
1980	..	..	3.3	4.3	3.1	3.1	4.0	2.7	4.8
1981	..	..	3.6	4.2	2.9	3.1	3.9	2.4	4.2
1982	..	..	3.6	3.9	2.7	3.8	2.9	2.3	4.1
1983	..	..	3.4	3.2	NA	2.9	2.8	2.3	4.1
1984	..	..	3.4	NA	NA	NA	NA	NA	NA
1985	..	..	3.8	NA	NA	NA	NA	NA	NA
Reduction effected									
over 18 year period to									
1983	..	..	34%	62%	47%	53%	61%	57%*	65%*

* Over 13 years 1970-83

NA: Not Available

Source: Federal Transport Department, Australia, 1985-86 Crash Statistics.

FIGURE 2.5

COMPARISON OF NEW ZEALAND TRAFFIC STATISTICS
WITH SOME OVERSEAS STATES

			NZ (1984)	NSW (1984)	Victoria (1984)	Queensland (1984)	Ontario Province (1985)
Population	..	..	3.3m	5.4m	4.0m	2.5m	9.1m
No. of Drivers	..	..	2.0m	3.3m	2.4m	1.8m	5.7m
No. of Vehicles	..	..	1.95m	2.7m	2.2m	1.4m	5.4m
Minimum Driving Age	..	..	15	17	18	17	16
Vehicles per Capita	..	..	0.60	0.51	0.55	0.56	0.60
Vehicles per Driver	..	..	0.97	0.82	0.91	0.78	0.95
Fatality Rates:							
per 100,000 people	..	..	20.2	19.2	15.9	20.3	13.1
per 10,000 vehicles	..	..	3.4	3.6	2.7	3.3	2.2
per 100 million vehicle km travelled			2.5	2.3	1.7	2.2	1.8

THE ORGANISATION

301 In 1985–86 the Division spent \$66 million in striving for its goal of safe and efficient road use.

FIGURE 3.1						
COST IN EACH MAIN AREA						
Programme				\$m	%	Number Employed
Traffic Research	..	..	..	0.8	1.3	12
Traffic Engineering	..	..	..	0.9	1.4	26
Administration and Regulatory	..	..	..	8.1	12.2	104
Road Safety Education	..	..	..	3.6	5.6	109
Traffic Enforcement	..	..	..	44.5	67.2	1,145*
Vehicle Inspection	..	..	..	8.1	12.3	242
				<u>\$66.0m</u>	<u>100.0</u>	<u>1,638</u>

* 981 are traffic officers

Revenue of \$23.7 million was collected by the Division. The main components of this were vehicle inspection (\$7.1m), driver licensing (\$1.5m) and payment of traffic infringement fees (\$8.8m). In addition, the Courts imposed fines estimated at \$18 million in 1985. Collection of these fines is reflected in Justice Department receipts.

302 Operationally the Division is split into the following activities:

- *Road Traffic Enforcement*: Enforcing traffic rules and regulations, providing traffic management services such as point duty and escorting wide loads, and performing other functions such as driver testing, enquiry and service of summonses. Enforcement of economic regulations such as transport licensing is also important.
- *Road Safety Education*: Providing education on road safety topics, mainly to school and pre-school age groups, teaching school patrols, developing traffic education programmes and conducting road safety courses for adults such as defensive driving.
- *Vehicle Inspection and Automotive Engineering*: Setting vehicle safety standards, developing vehicle inspection programmes and, in some parts of the country, operating vehicle testing stations.
- *Research*: Evaluating and monitoring traffic safety programmes, monitoring overseas research, maintaining the road accident recording system and analysing system data to identify causes.
- *Traffic Engineering*: Developing and implementing standards for traffic engineering practices such as determining the maximum permissible weight and length of vehicles, setting the location of speed zones and advising on the siting of pedestrian crossings. Where not otherwise supplied by the local roading authority, supplying advice on traffic engineering. Conducting systematic accident investigation.
- *Administrative Systems*: Maintaining records of licensed drivers and registered vehicles on the Wanganui computer and maintaining management information systems.
- *Publicity*: Promoting the safety and efficiency campaigns of the Division.

RESEARCH

Research Basis

401 The traffic system is a complex interrelationship of factors. Adequate research is fundamental to planning the effective use of the Division's resources. On a policy level, research is needed to assist evaluation of policy options, such as the review of the open road speed limit. At the operating level, good research is an essential input in setting priorities, choosing the best approach, and evaluating whether the desired results are being achieved. An example of using research in this manner would be identifying alcohol-impaired driving as the most significant contributing factor in road accidents, deciding random stopping is an effective approach and, after a period of time, evaluating whether this approach is reducing the number of alcohol related accidents.

402 The research branch has an establishment of 12 people whose efforts are supplemented by operational branches as necessary. The branch has a range of responsibilities such as maintaining the accident reporting system, evaluating the Division's safety programmes, preparing submissions, conducting research projects and publishing results. With the branch's limited size, it is especially important that research is directed at the most essential subjects and that the branch is aware of overseas studies and activities. Results then need to be analysed and communicated promptly to enable timely decisions.

403 The Division has established a committee, representing the operating branches, to ratify research projects to be undertaken and to set priorities on those projects. The projects planned to be undertaken in 1985-86 are detailed in Figure 4.1. In each of the last two years, the research branch has not been able to complete all of its selected projects. Project control needs improvement. Management needs to allocate appropriate levels of human and financial resources to enable successful completion of projects to deadlines. The Division contracts out research work to external research agencies where it considers it does not have the appropriate skills available in-house. This option also provides the benefits of flexibility, a wider skill base, and payments related to performance.

404 Recommendation

• **Control over all aspects of the research programme should include the establishment of financial budgets and the allocation of appropriate human resources. Results should be assessed against these budgets.**

Case Studies

405 As discussed earlier, adequate research is essential for informed decision making at both policy and operating levels. Examination was made of the amount of research into two significant traffic-related areas, namely, Alcohol-Impaired Driving and the Review of the Open Road Speed Limit. Contact was made with a number of overseas traffic enforcement and research bodies to establish, in general, what information is available and the ease with which information could be obtained. Our findings are detailed below.

406 Alcohol-Impaired Driving

Alcohol is the most frequent contributory factor to road accidents in New Zealand. The analysis of alcohol-impaired driving patterns in New Zealand is performed by the DSIR, several

FIGURE 4.1

DATA ANALYSIS	Research Priority	HUMAN FACTORS	Research Priority	ENGINEERING/ENVIRONMENT	Research Priority
Traffic Engineering		Alcohol and Drugs		Pedestrian accidents	
— identification of accident black spots	3	— advice on changes to Drink Drive laws; inconvenience to drivers		— extent/nature	1
WOF/COF				Restraints	1
— prediction model of defects arising dependent on period between tests	1	— effectiveness of recidivist rehabilitations		Motorcycle braking campaign work	
— computerisation of WOF/COF data	1	— efficient breath test analysis		— monitor use	1
Motor vehicle design standards		— evaluation of random stopping	1	Seatbelt durability	1
— relationship of car size to injury		— alcohol involvement in accidents		Speed control	
Accident Reports	2	— Pedestrian safety		Traffic Engineering	1
— Improve production of collision diagrams facility to profile accidents, by region		— safe play programme impact		— checks of operating speeds	
—national grid for accident location	3	— time of accidents for school children		— evaluate methods of assessing traffic management changes	
— rank factors contributing to accidents	2	— street crossing programme design		Accident reports	
— refinement of blackspot analysis	1	Driver training/licensing		— guidelines to improve feedback on effectiveness of traffic engineering changes	
— making accident information easily accessible to all decision makers	2	— evaluate new graduated licensing benefits		— evaluation of accidents at Give Way v Stop intersections	
— 1986 risk exposure survey (to enhance policy selection/evaluation)	1	— eyesight correction in over 50s		Traffic flows management	
— value of indirect exposure methods	2	— function requests for new tests		— truck accidents with effect of deregulation	1
— acquire computer products to enhance productivity of research		(a) pupils		— time services study on accident	1
— improve speed of Traffic Accident Reporting (TAR) - 6 down to 2 months	1	(b) instructors		— survey of occupants per vehicle	
— Traffic Officer Activity reports operational analysis		— evaluation of training guide		Public Relations	
— sources/correlations with corroborative data (Info ACC)	1	— understanding how skills acquired and maintained		— background data, guidelines and feedback on the effectiveness of RTD	
— enhance TAR systems quality	1	— advise Govt how to reduce accidents with young drivers	3	— evaluate behaviour as result of motorcycle braking campaign	
		— validation of new theory test		Restraints	
				— study of adequacy of 3 point belt	

universities and by the Division. The success of any countermeasure against the alcohol-impaired driver will be dependent upon fully understanding the problem. Studies conducted by the Division have focused on evaluating the impact of the random stopping campaigns. To date, there has not been a great deal of research in New Zealand on the effectiveness of punitive measures and rehabilitation programmes on the alcohol-impaired driver.

407 To combat the level of alcohol-impaired driving, the Division uses random stopping as its principal enforcement technique. Vehicles are stopped at random and the traffic officer decides whether to administer a breath test. This approach allows significant discretion by the traffic officer on who is tested. Various techniques are in use internationally. For example, New South Wales uses "random breath testing". Vehicles are stopped at random but a compulsory breath test is administered, thus removing traffic officers' discretion in the matter. A 1986 study by the Australian Federal Office of Road Safety reviewed the different drink driving controls in eight states and territories. The study concluded that:

- random breath testing is done in six states and is more effective than random stopping done in two states,
- random breath testing is most effective when done at a constant and high level, and
- the additional cost of a high and constant level of random breath testing is more than covered by the savings from reduced accidents.

New South Wales, which uses a high and constant level of random breath testing, has shown dramatic reductions in alcohol related accidents. The main differences between New Zealand and NSW are the extent of the discretion that a New Zealand traffic officer can exercise and the higher level of effort in NSW. Given the success in NSW, it is necessary that the New Zealand approach to alcohol-impaired driving (i.e., both techniques and resources) be reassessed.

408 Recommendation

◆ **More research is needed into methods of combating alcohol-impaired driving in New Zealand, in particular:**

- **establishing the degree of the problem, i.e. what level of alcohol-impaired driving is actually occurring;**
- **establishing the effectiveness and efficiency of random stopping with discretionary breath test vis-a-vis other techniques and resource levels; and**
- **establishing the effectiveness of the punitive measures (e.g. disqualification from driving) and rehabilitative measures (e.g. referral to a defensive driving course).**

409 Change of Open Road Speed Limit

The change in the open road speed limit in July 1985 from 80 to 100 kilometres per hour was a significant change to the road rules.

410 In 1984 the Parliamentary Committee on Road Safety conducted a review of the speed limit. The Ministry of Transport provided a submission to be used as a discussion draft.

411 The submission provided analysis of vehicle operating speeds and motorists' behaviour together with general comments on safety, fuel economy, enforcement and mobility issues. It discussed six speed limit options and its main recommendations were for a 90 km/hr speed limit for cars and motorcycles and that the Ministry increase its level of enforcement in conjunction with increased penalties.

412 After reviewing the submission, the Committee then asked the Division to provide additional information on:

- Projections of the likely effects of a speed limit change in terms of fuel consumption, road accident levels, impact loading on the road and projected hospital costs.
- Comments on enforcement methods currently employed and those other methods under consideration.
- An evaluation of the four most effective speed detection methods available.
- A summary of the major issues surrounding the speed limit debate.

413 *Issues Raised by the Committee*

The Committee, in recommending a raised speed limit, proposed simultaneous measures to ensure there was no further increase in the average operating speed or the range of speeds. These were:

- a larger and enhanced speed detection effort, and
- education of drivers on the 100 km/hr limit and the dangers of not complying with the limit.

414 Speed detection enhancement was focused on two main areas:

- the redeployment of existing methods such as using a stationary radar unit inside a mufti patrol car, and
- the introduction of the "digitector" (speed-distance measured using two pneumatic tubes) which is not susceptible to early warning devices.

415 The digitector was to be one of the key methods of apprehending high speed violation in rural areas. While this method has been introduced since the Committee's deliberation, the process of obtaining the equipment resulted in limited availability for a significant period subsequent to the Committee making its recommendation. During that period, enforcement continued as previously. The use of the digitector did not, therefore, result in the enhanced detection requested by the Committee. Since its introduction this equipment has proven most beneficial in urban areas where a lesser manpower commitment is needed for effective operation and the level of offending is higher.

416 In responding to the Committee on available speed detection techniques, the Division reported on its procedures of patrol, stationary radar, the digitector and air surveillance. Overseas experience has indicated that a variety of techniques are available and are acceptable to the respective judiciatures. Techniques such as moving radar (i.e. radar suitable for use in a moving vehicle) are available and used in a number of countries. A 1979 study for the United States Department of Transportation stated:

"...because the single officer, independently operating an unmarked car unit with a moving radar is the most productive and cost effective configuration evaluated, such configurations should be used as much as possible for national maximum speed limit enforcement."

417 In other words, since at least 1979, there has been ample evidence of a technique that is both efficient and effective in detecting speeding drivers. The reasons given for not adopting this technique relate to proving the accuracy and reliability of equipment. Some reservations were held concerning the accuracy of earlier models of moving radar. The Ministry, over the years, has been required by the Courts to clearly demonstrate the accuracy of new equipment and, in consequence, the DSIR has applied stringent tests before giving clearance. In the light of these doubts the Division did not apprise the Committee of the availability of moving radar. This equipment, considered effective overseas and meeting standards of evidence in comparable overseas jurisdictions, has only recently been tested in New Zealand.

418 The driver education programme (see paragraph 413) was implemented in August 1986, 18 months after the Committee's recommendation. Ideally it should have coincided with the raising of the limit; as a result a major input to speed constraint was lost. At the time of the

Committee's recommendation the Division had committed its current year's budget and was unable to implement the publicity campaign until the following year.

Other Issues

419 The Division has been able to do only limited research in areas such as:

- What are the more effective enforcement measures? For example, to what extent do verbal warnings or punitive measures (e.g., fines, disqualifications, imprisonment) affect subsequent driver behaviour, the likelihood of future involvement in accidents, or the number of convictions?
- Do the rehabilitative measures, such as referral to a defensive driving course, produce the desired changes in driver behaviour?
- Who is the repeat offender and what is the most appropriate action for dealing with this type of offender?

420 One reason given for the limited research on these questions was that there is no research access to personal information contained on the Wanganui Computer Centre. Under the Wanganui Computer Centre Act, the Centre's Policy Committee is able to permit research or statistical analysis provided the information supplied from the Centre does not contain information relating to an individual. The effect of this is that research necessary to identify the effect of any punitive or rehabilitative measures taken following enforcement action is limited, since such research requires analysis of individual case histories.

421 Recommendation

◆ **The Wanganui Computer Centre Policy Committee should be requested to consider the purposes to which information can be applied for research purposes. To establish the effectiveness of any penalties, there is a need to trace individual histories. The extent to which this is currently permissible under the Wanganui Computer Centre Act 1977 needs to be identified.**

THE DIVISION'S RESPONSE TO SECTION 4

Paragraph 403: *Research projects have in the main been completed and, where this has not been the case, there have been good reasons. The major reason involves the introduction into the programme of higher priority projects requested, for example, by a Select Committee.*

Paragraph 404: *In the 1985–86 financial year the Division introduced a revised planning control system for its research programme. This is to be reviewed shortly and the above recommendation will be taken into account together with the Ministry's review of its financial management system.*

Paragraph 408: *We agree that more research is needed in this area as well as in most other areas of traffic safety and efficiency. The suggestions in the recommendation will be considered in allocating the limited resources available across the areas of research need.*

The Ministry undertakes its own research in the alcohol area, encourages others to contribute and closely monitors overseas developments. By comparison with other countries New Zealand has more than played its part in researching this very difficult area and the Research Branch's leader is an internationally recognised expert.

The Ministry agrees on the need to establish the degree of the problem in New Zealand and has recently received approval to commence a project designed to provide this information.

The Division has already established the effectiveness and efficiency of random stopping and is currently reviewing modifications which may lead to greater effectiveness as part of a

Select Committee Review of Alcohol and Drug Impairment. The Australian Federal Office has not published any acceptable scientific study which assesses the New South Wales random testing approach to be more cost effective than the New Zealand approach. To the Ministry's knowledge there is no evidence to suggest that with the same manpower and publicity resources New South Wales would not have achieved the same effect using the random stopping technique. The New South Wales random testing approach is being closely monitored to get an assessment of the effects and the total resources being used.

Paragraph 417: It is the Division's assessment that moving radar devices would not be as cost effective as digitectors in New Zealand. Nevertheless, there is a case for using both in certain situations, and the Division will continue to keep under review the relative effectiveness and use within the resources available of these and other devices.

Paragraph 418: Although the major driver education programme was implemented in August 1986, a smaller campaign was conducted at the time of the speed limit change in July 1985. This generated considerable media publicity and public discussion.

Paragraph 421: The Division agrees with this recommendation and notes that the Policy Committee has recently agreed to release some information under controlled conditions for a specific project.

ROAD SAFETY EDUCATION

Road Traffic Instructors

501 The Road Traffic Instruction branch aims primarily to ensure that road users are adequately informed, educated and trained in road safety and efficiency practices. The branch has 102 staff and concentrates on teaching road safety concepts to school and pre-school children. The branch also trains school patrols.

502 An analysis of how traffic instructors spend their time is provided in Figure 5.1. The concentration on schools is based on the assumption that formative training of young road users will have a beneficial long-term effect on road safety.

FIGURE 5.1

ROAD TRAFFIC INSTRUCTION ACTIVITY ANALYSIS
(Time Excluding Leave and Sickness)

	%
School Safety	
Principal/Teacher Discussions	8
Preparation	15
Teaching	20
Reports	1
Pupil Safety (monitoring school patrols, traffic wardens, school bus routes)	10
	<u>54</u>
Adult Safety	
Training Courses	5
Public Relations/Displays/Publicity Campaigns	3
Enforcement (Patrol and Court)	4
Driver Testing/Driver Tutor Approval	3
	<u>15</u>
Other	
Traffic Patrol/Travel	10
Administration and Personnel	14
Training and Development	7
	<u>31</u>
Total	<u>100</u>

503 The proportion of classes covered in the last two years is shown in Figure 5.2. While this information is quantitative rather than qualitative, it provides some indication of where the branch has placed its priorities.

FIGURE 5.2
PROPORTION OF CLASSES COVERED BY SCHOOL LEVEL
 (Source: Parliamentary Paper F5)

	1984-85	1984-85	1985-86	1985-86
	Target	Actual	Target	Actual
Pre-school	50%	38%	50%	31%
Primary	62%	66%	62%	65%
Secondary	40%	26%	40%	26%

504 In the course of the audit, responses were sought from schools and education boards in three districts. The results of this are summarised in Figure 5.3.

FIGURE 5.3
ROAD SAFETY EDUCATION IN THE CLASSROOM
SUMMARY OF RESPONSES FROM SCHOOLS AND INDIVIDUAL TEACHERS

	<i>District 1</i>	<i>District 2</i>	<i>District 3</i>
Initiation of contact	Traffic instructor, but inconsistent as between instructors.	Traffic instructor, but inconsistent as between instructors.	Traffic instructor in most cases, but teachers on occasion.
Extent of contact	Ranged from none to multiple visits to classes. Teachers commented on a need for more contact.	Several times a year at all schools questioned.	From limited to extensive visits.
Quality of Presentation	Wide variation from excellent to average. Sometimes too authoritarian. Need teacher involvement.	Dependent on individual ranging from "good to bad". Main impact is from a uniformed officer.	Good, but improved presentational skills would help. Communication skills improving. Still dependent upon individuals.
Availability of Resources	Need to advise resources available and new developments.	Resources used considered very good.	Very good. Integrates well into other parts of syllabus.

505 The branch is also involved in presenting courses on adult road safety education. These cover defensive driving, sessions for youth groups and, increasingly, courses directed at parent awareness such as the Small Steps to Safety campaign.

Entry to Schools

506 As indicated in Figure 5.3, the level of coverage varies significantly between schools. While the education syllabi include road safety as a general area to be covered, the relative importance of this topic and the amount of time to be spent at each of the pre-school, primary and secondary levels is unspecified within each syllabus. Each school and each teacher is left

to interpret and apply the syllabus as they see fit. The emphasis on road safety education is therefore dependent on the personal view of each teacher involved. Sweden, by comparison, prescribes that 20 hours of road safety instruction each year is to be included in lessons to all classes.

507 Traffic instructors have to "sell" the need for road safety education to teachers individually. The success of this approach is dependent upon the rapport built up between the traffic instructor and individual teachers. Nationally there is no co-ordinated scheduling of visits to schools to ensure all classes are visited. One example of the lack of teacher interest is shown by one urban school which indicated that as there was no major road near the school there was no need for road safety education. The Police are asking the Education Department for permanent inclusion of law and order concepts in school syllabi.

Lesson Planning

508 At present, each traffic instructor develops and presents each lesson jointly with the teacher. Every class situation is considered unique and a lesson plan is specifically tailored to local needs. While the traffic instructor may use knowledge previously obtained or other resources developed within the region, the emphasis remains on developing a lesson specifically for that class. This approach assumes that each learning experience is different, each class is different and every age or geographical grouping is unique. Over the years the branch has developed 20 centres with resources such as visual aids. However, when the traffic instructor starts to prepare a lesson, the only guidance available is a list of 93 topics targeted at specific age groups. At a national level no guidance is provided on what areas are important to cover under each topic, such as lesson objectives, concepts to be presented, resources available, presentational techniques, or evaluation criteria. Standard lesson plans are necessary to ensure:

- preparation time is minimised,
- a consistent approach is adopted, and
- the correct message is presented to the right age level.

Standard lesson plans would also be an advantage given the low experience level of the staff.

509 By comparison, the Police Education Unit centrally develops specific lesson plans prepared around particular themes. It applies 7 percent of its resources to developing standard resource packages. For the last 18 months the Division has been attempting to fill two staff positions which will be dedicated to developing standard lecture packages.

Conveying the Road Safety Message

510 As shown in Figure 5.1, traffic instructors spend only 20 percent of their time on classroom presentations, a key task, while 23 percent of their time is used for lesson preparation and "selling" the need for road safety education in schools. If the branch were centrally able to prepare lesson plans and to establish the need for road safety education in schools, considerably more time would become available for key activities. The branch could, therefore, exceed the targets it has set for classroom coverage (see Figure 5.2) with its present level of resources.

511 The management of the branch would prefer traffic instructors to ultimately become resource suppliers to teachers with the presentation being made by teachers. While the branch has been working towards this objective it has achieved some progress but with some confusion. Discussions with traffic instructors and teachers during the course of the audit indicated that they felt a prime task of the traffic instructor was making classroom presentations. The branch's information system measures classroom presentation time. On the other

hand, branch management had said traffic instructors should be resource suppliers with teachers doing the classroom presentations. This type of activity is not measured. The branch needs to clearly communicate its role to both its own staff and to teachers. Furthermore, it needs to decide on what is the best strategy and approach for implementing its role of "resource supplier".

Classroom Presentation

512 Although the traffic instructor may not do the actual teaching, there will remain a need to be able to communicate to teachers the message and the best approach for presenting the chosen topic. Discussion with teachers has indicated a wide variation in the presentational skills of individual traffic instructors. The majority of traffic instructors do not have a teaching background. A two-week course is provided on the basics of traffic law enforcement (compared to the fifteen weeks training given to traffic officers). This basic training develops an initial understanding of what is involved in road safety and law enforcement. However, the important skill the traffic instructor needs is how to handle and present educational resources. The branch provides limited formal training on presentational skills. Traffic instructors are expected to learn on the job and are left to develop their skills on their own.

513 The Police approach to obtaining and training their education officers is significantly different. These officers are recruited from the ranks of the Police force. The first three months involves obtaining a detailed understanding of the various resources available, a two-week course at the Hamilton Teachers College, observing in classes, and training by regional supervisors. A continuing education programme also exists. It consists of three two-week courses at the college over two years. The prime objective of these courses is to ensure that the education officers understand current teaching methods and learn to target resources to the appropriate age level.

Performance Measures

514 At present, adequate performance measures have not been developed to assess the effectiveness of the road safety education programme. The national reporting of the percentage of classes visited is a surrogate measure and it can be misleading as it reflects neither the number of classroom contacts made nor the number of repeat visits to a school. For outside parties to be able to assess the effectiveness of this branch there is a need to know:

- whether all schools were contacted to ensure they included road safety education within their syllabus,
- the number of lessons given, including repeat visits to a class, and
- whether the lessons achieved their desired effect.

For programmes of this type, where it is difficult to measure the end result, it is necessary that the objectives, approach and results are formally evaluated on a cyclical basis. The Division is currently re-examining its management information system to identify how it can better monitor the school education activity.

School Patrol

515 The branch is responsible for training the school traffic corps. In 1986, more than 20,000 students manned 1,476 crossings while another 3,600 acted as bus wardens. With about 5 accidents a year, the accident level has been consistently low. By using students rather than the alternative of adult supervision, the branch has been able to run the programme cost-effectively. By comparison, New South Wales, which uses adult supervision, expends \$4 million annually.

516 Recommendations

- ◆ The Road Traffic Instruction branch needs to place higher priority on the development of standard lesson plans and resource packages. These should be readily available to teachers as well as traffic instructors.
- ◆ The Ministry should formally approach the Department of Education to obtain permanent inclusion of a programme of road safety education within school syllabi.
- ◆ The branch needs to ensure it has a systematic "marketing strategy" to ensure that all schools are informed at least annually of road safety resources packages available and how those packages can meet the various syllabus objectives.
- ◆ The training of traffic instructors in presentational skills needs improvement.
- ◆ Adequate effectiveness measures need to be developed to demonstrate that road safety is being covered in schools, that the resource packages are being used by schools, and the extent to which traffic instructors are required to participate in class presentations.

THE DIVISION'S RESPONSE TO SECTION 5

Road Safety is currently included in the Social Studies and Health syllabi of the school curriculum.

In 1976 the Ministry was told to move from the "teaching" to the "resource" approach to traffic education or risk exclusion from schools. This was done, and in 1982, Mr E. O. Lenz, an education specialist at Canterbury University, surveyed 728 primary school teachers and found that the change had been accepted.

Field staff participate in Education Department and Board curriculum committees, attend local teacher in-service training meetings, and have assisted in developing individual school health schemes including road safety. The Division will approach the Department of Education as recommended.

The branch is placing higher priority on the development of base material for teaching units and expects priority subjects to be completed this year.

In addition larger stand alone programmes covering cycling skills, defensive cycling, alcohol, defensive driving, and safe walking for example will be available as programmes within the school system in 1987.

There is a marketing strategy in operation. Resources allow for a traffic education input into half of all listed classes (320 average per officer per annum). In addition a target is set to maintain contact with all schools during the year. Resources dictate the ability to reach these targets. Where it is not possible to make a personal contact other agencies are used e.g. Rural School Advisers or resources are made available on request. The branch will re-examine its marketing strategy with a view to making it more effective. It is intended that a more formal system of introductory training will be developed to meet the need identified in the audit report. This will include presentational skills.

During the past 12 months new management systems have been developed to ensure that information is available to more accurately determine what work is being carried out in schools and community groups and allow for improved measures of effectiveness. In addition new performance measures have been developed and are included in the Road Transport Division Strategic Plan. The Division regards the development of effectiveness measures as a very difficult but most important task. We will continue our efforts in this area.

TRAFFIC ENFORCEMENT

Road Traffic Enforcement

601 Over 92,000 kilometres of roads in New Zealand are used by some 2 million drivers.

602 Rules have been developed to promote both the safety of road users and the efficiency of travel. These two objectives can be in conflict. For instance, reducing speeds increases safety but the increased travel time reduces efficiency.

603 In the majority of countries, traffic enforcement is handled by the Police. New Zealand is one of the few countries that separates traffic enforcement from other law enforcement functions. However, the need for traffic enforcement is accepted in most countries. In 1982, the International Association of Chiefs of Police stated:

"Traffic laws should be enforced at a level sufficient to ensure the safe and expeditious movement of traffic. Traffic enforcement policy should ensure consistency and uniformity of interpretation. Assignment of traffic enforcement personnel shall be based on the principle of selective enforcement; resources should be directed towards specific violations, in specific locations, based primarily on traffic accident experience."

604 One of the main principles of traffic enforcement is that offenders should be apprehended, educated (in terms of correct driving behaviour), and, where necessary, punished. It is necessary that motorists believe that the chance of offence detection is high, that prosecution is inevitable, and that penalties are applied promptly.

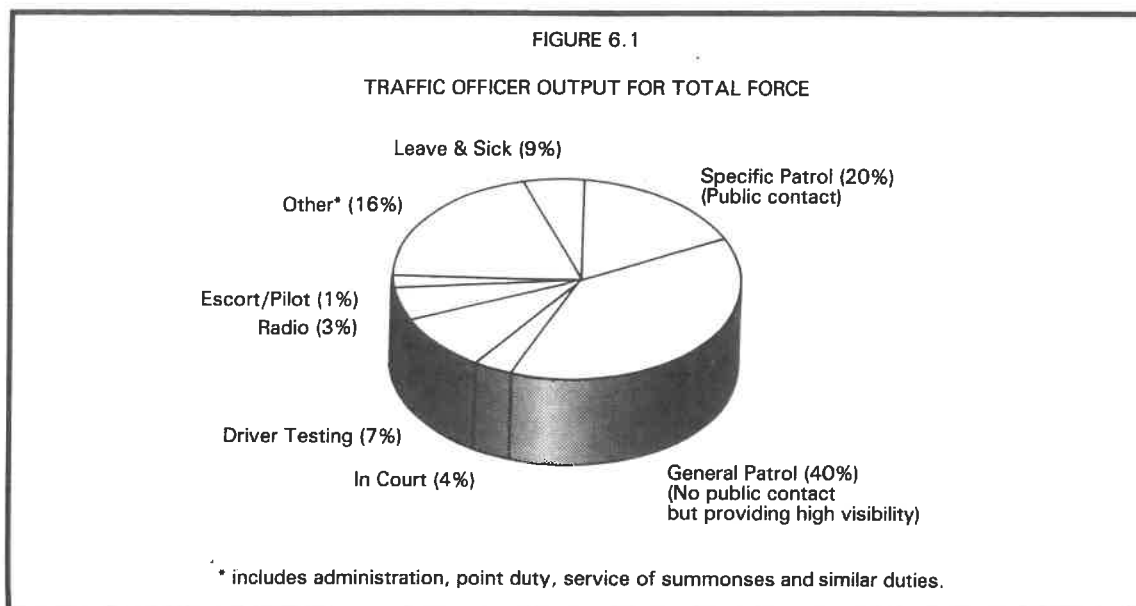
605 The traffic officer force is highly motivated. Morale appears high and staff turnover is relatively low. Individual officers demonstrate a high level of competence in their job and are dedicated to improving road safety. This dedication is achieved in spite of a number of negative influences. Enforcement action may place a traffic officer in opposition to the driving public and result in conflict. This situation, when coupled with the increasing assaults on traffic officers, has resulted in a high level of job stress.

606 Traffic enforcement covers a wide range of activities, including:

- Patrol
- Traffic management, e.g., rush-hour management, escorting wide loads, special events, point duty for VIP tours, computer-controlled lane systems and priority road systems
- Driver testing
- Court appearance
- Enquiry and service of summons
- Administration
- Attendance at accidents
- Assisting the public.

Patrol is the residual of traffic officers' time after meeting the other commitments. Figure 6.1 shows how a typical year is spent.

607 Except for five areas covered by local authority traffic forces, the Division's traffic force is spread to provide a coverage over the whole country. In 1984, a review of staffing locations was undertaken. After due allowance for servicing fixed commitments, it was proposed to allocate the current staff level on the basis of one patrol per day per 9,500 people. This ratio was modified in some areas to reflect such factors as traffic flow and distances to be covered. Even after this reallocation of staff the Division still has problems providing in-depth coverage at high accident times. The traffic force services several fixed commitments such as driver testing



and traffic management within urban areas. The remaining time is available for patrol, which is primarily scheduled to provide coverage between the hours of 5 a.m. and 2 a.m. There are generally less than 150 traffic officers on duty at any one time, i.e., a national average of one officer for each 600 km of road. However, the number on duty may reach 250 during the changeover between day and evening shifts to handle traffic peaks.

Enforcement Priorities

608 One of the objectives of the enforcement branch is to reduce the number of injuries and fatalities arising from road accidents. The question is "Can a road traffic enforcement operation actually affect the road toll?". At present, there is no established model or framework to quantify the effect of general enforcement on the road toll. New Zealand is not alone in its inability to answer this question. The enforcement branch is, however, able to assess the effect of specific operations over a period. Assessments have been made of the effect of alcohol blitzes and seat belt campaigns, with particular emphasis on the success of the techniques applied. However, it is not known whether patrol has any effect.

609 The practice in this country is to follow the commonly accepted principle of selective enforcement. Publicity is used to enhance enforcement presence. Targets are established using the local knowledge of individual district commanders. Local priorities are then combined with national targeting of major problems such as alcohol-impaired driving and seat belt usage. At present, the use of selective enforcement is not based on a cost/benefit analysis. While there are problems associated with assessing the number of lives saved by a specific programme, this does not preclude a cost/benefit analysis being conducted. The discipline of examining the cost/benefit of a particular enforcement programme is becoming more frequent in overseas jurisdictions. For example, in Australia a detailed analysis was made of the cost/benefit of random testing for alcohol-impaired drivers. This discipline is not yet evident in the setting of New Zealand traffic enforcement priorities.

Deployment Criteria

610 To be effective, a traffic force must be proactive, that is, out looking for the problems. Road patrol is the principal method of achieving this. It is reasonable to expect that patrol coverage should be matched to those times and locations that have the greatest number of accidents and highest traffic density.

611 A comparison was made of patrol time against casualty and fatality occurrences. Our review showed that a comparatively high level of patrol occurs during the weekday period of 10 a.m. to 4 p.m. when accident rates are low. Conversely, there is low patrol coverage during the evening hours when accident rates are high. The statistics are shown in Figure 6.2. To determine the reasons for this, a review was made of the system for rostering staff. In urban areas, where the majority of traffic officers operate, some overlapping of shifts is planned to try to cater for the two traffic peaks.

612 Traffic officers receive an allowance of 32 percent of basic salary to compensate for the requirement to work shifts. Agreement between the union and branch management has resulted in the standard working conditions being linked to the level of this allowance. The hours worked on week nights or weekends are restricted to the level paid for by the 32 percent allowance. This has resulted in rosters providing heavy daytime coverage on weekdays and has limited the availability of traffic officers at night or during weekends.

613 Recommendation

◆ **The Division should ensure it has the best match between traffic officers on duty and high accident and traffic density times.**

Patrol

614 Patrol can be divided into two types of activity. The first type is "general enforcement". This operates under the philosophy that high traffic officer visibility will deter motorists from offending. For example, at peak holiday weekends, officers patrol a beat on State Highway 1 with the purpose of maintaining the highest visibility so that drivers have the perception that the traffic force is on the road in number. It is believed that this practice results in drivers exercising more care. The second type of patrol activity is providing "specific enforcement". This is where officers seek (through the use of techniques such as microwaves, digitectors, stopping drivers for various infringements or random stopping for drink driving) to identify and take educative or enforcement action against motorists who contravene good road safety practice.

615 Unlike most agencies of government, the traffic enforcement branch maintains very detailed records of the activity undertaken by each traffic officer. This provides management with the opportunity to examine the performance of individual officers.

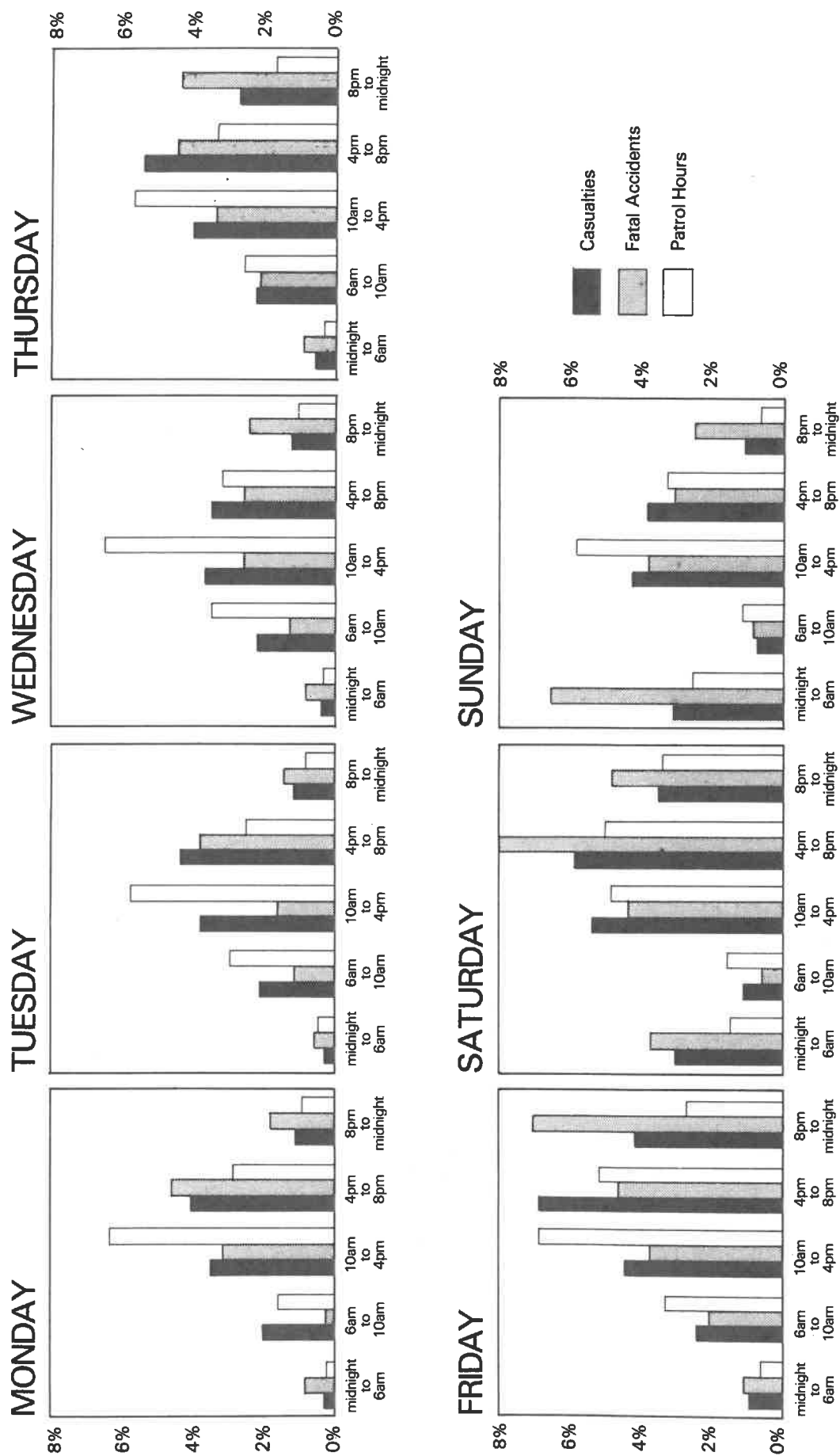
616 Analysis of this data suggests that specific enforcement patrol represents one-third of all patrol undertaken. The remaining patrol is to provide general enforcement. The latter is supplemented by the visibility of traffic instructors travelling to and from schools in marked patrol cars. The emphasis on general enforcement indicates a significant confidence that high visibility of traffic officers will improve driver behaviour. No evaluation has been made of the benefits of general enforcement versus specific enforcement patrol. Research is needed to identify the effectiveness of each type of patrol and to establish the best mix.

617 The total time and mix of patrol can also vary between localities. Figure 6.3 analyses patrol in four regions. South Auckland showed an anomaly in that total patrol time achieved was significantly lower than expected. This was due to the degree of enquiry time resulting from a high number of hit and run accidents. As would be expected, rural traffic officers achieve a somewhat higher than average amount of patrol time. This is a reflection of the lesser number of traffic management tasks that rural officers have to fulfil.

618 A significant variation occurs in the mix of specific and general enforcement patrol activity between rural and urban areas as shown in Figure 6.4. It is reasonable to expect an officer to have more public contact in the urban environment as traffic density is greater.

FIGURE 6.2

COMPARISON OF LEVELS OF PATROL TO LEVELS OF
FATAL ACCIDENTS AND CASUALTIES BY THE TIME OF DAY



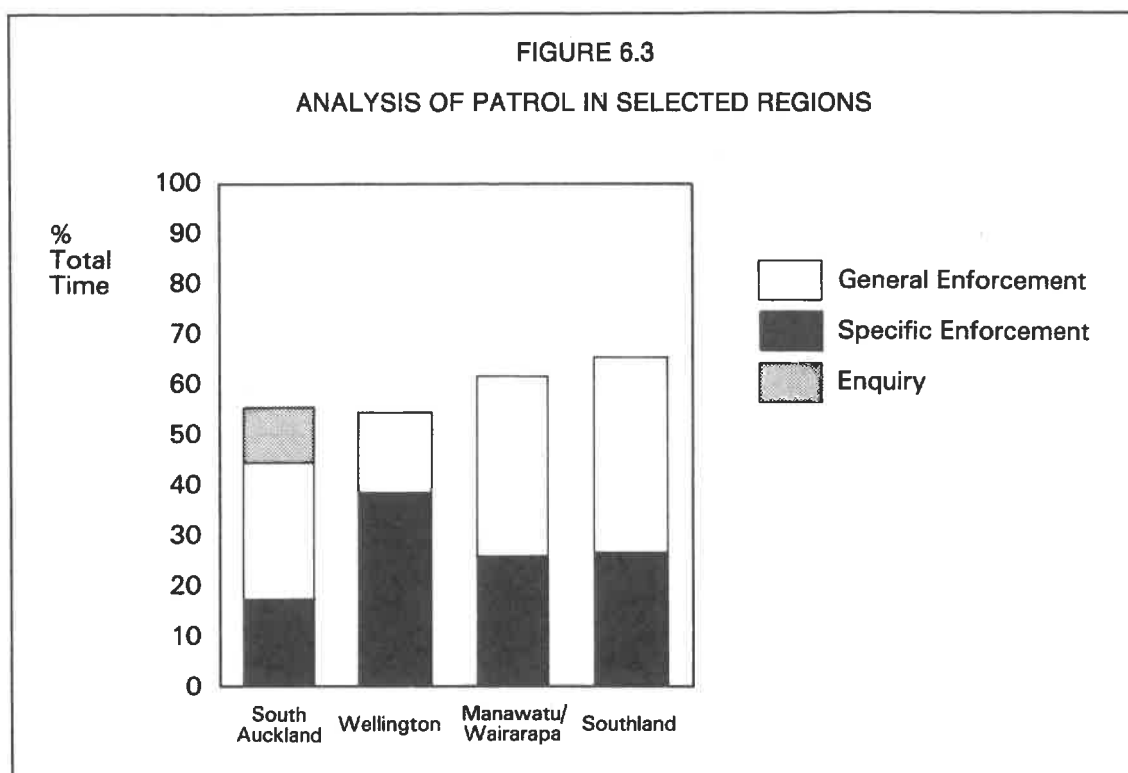


FIGURE 6.4
HOW PATROL TIME IS APPLIED

					<i>Specific Enforcement</i>	<i>General Enforcement</i>
Rural	..	..	..	..	30%	70%
Urban	..	..	..	..	53%	47%

619 Recommendation

- Continued work is needed to develop measures assessing the effectiveness of each type of patrol. This may include the development of models detailing the extent to which traffic officers should be making enforcement contacts when on patrol.

Discretion

620 Each enforcement action may result in a traffic officer using discretion. An officer can exercise discretion as to whether an offender is to be stopped. If an offender is stopped, the officer may consider that the most appropriate action is to issue a warning. The extent of discretion at this point is also influenced by enforcement branch policy. Currently, this requires that Traffic Offence Notices ("tickets") be issued for all major offences.

621 Figure 6.5 shows that there is a significant use of verbal warnings which is in line with branch philosophy. However, this philosophy is based on a subjective assessment that the most appropriate means to promote road safety is not always by issuing a ticket. No research has been undertaken to prove the validity of this assessment.

FIGURE 6.5
ANALYSIS OF 1985 ENFORCEMENT STATISTICS

	<i>Enforcement Actions</i>	
	(000)	%
Verbal Warnings ¹	523	55
Senior Officer Waivers ²	38	4
Instances where discretion applied	561	59
In pipeline ³	30	3
Paid prior to prosecution	199	21
Court Action		
Convicted	138	14
Dismissed	3	1
Withdrawn	19	2
TOTAL ENFORCEMENT ACTIONS¹	950	100

Notes

¹ These are the recorded enforcement actions. We are aware that in some instances traffic officers do not record verbal warnings with a consequent understatement of that figure.

² Chief Traffic Officers may waive tickets issued where either a satisfactory explanation is received or the ticket has been incorrectly completed by the traffic officer with the result that a prosecution would fail.

³ With the delays in input of data and the length of the Court process, not all enforcement actions are completed within the year.

622 It is important that the use of discretion is monitored. Currently, monitoring occurs only in an informal manner if a traffic officer is questioned by a superior officer. Within the Traffic Officer Activity recording system there is no analysis of the types of offences which receive verbal warnings. Monitoring discretion is difficult but it is essential that it is applied consistently. One summary of this worldwide problem is:

"Uniform enforcement is a critical element of an effective traffic law enforcement programme. The public will not protest when strict enforcement is justly and impartially administered. However, the public will object to a lack of uniformity in the application of traffic law."

(US Dept of Transportation—National Highway Traffic Safety Administration in 1986).

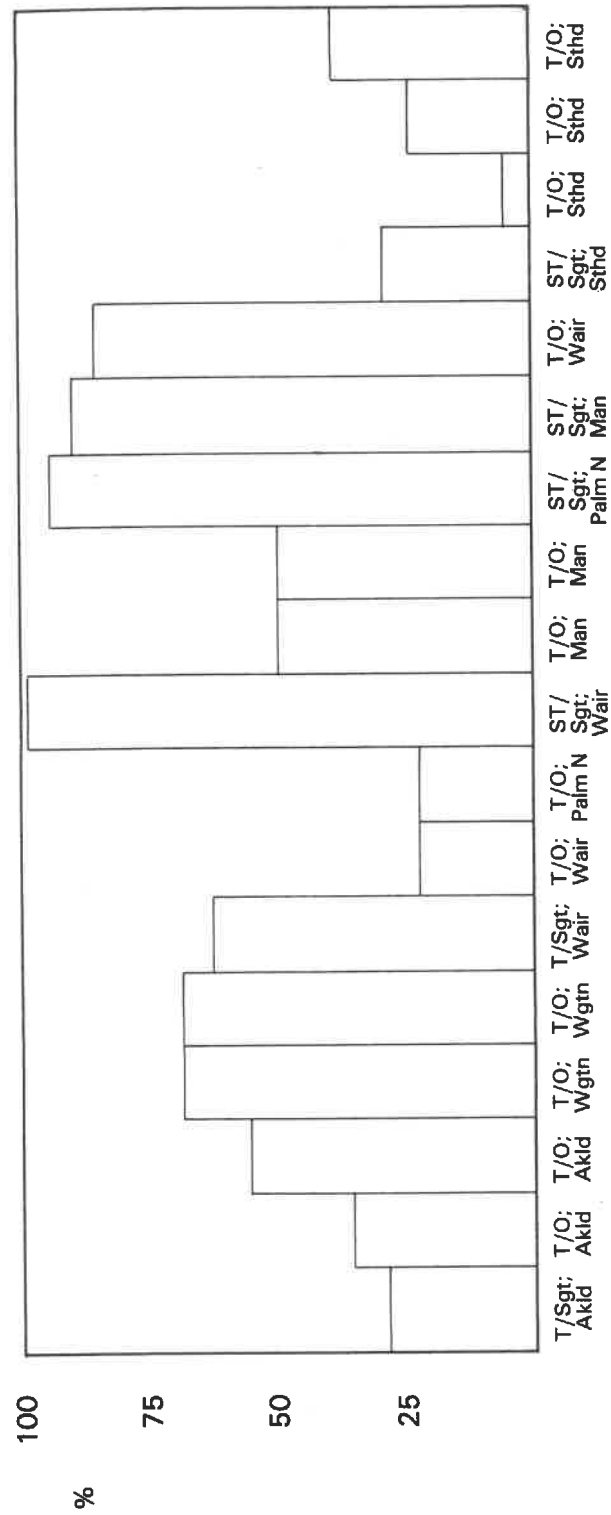
623 The level of verbal warnings issued varies widely between individual traffic officers, as shown in Figure 6.6. While the degree of discretion is determined on the merits of each case, the extent of variation suggests that no monitoring occurs to ensure consistency of application. The branch has recently issued a philosophy statement to its staff to heighten their awareness of the need for consistent application in the use of discretion.

624 Recommendations

• **The branch believes that all action by traffic officers should contribute to long term improvement in driver behaviour. If the branch is to continue its emphasis on applying discretion wherever possible in preference to issuing a ticket, it is necessary that:**

- research work be conducted to establish if it is more effective to emphasise verbal warnings for minor offences rather than to issue tickets,
- detailed monitoring occur of the use of verbal warnings to enable management to more clearly identify any variations, and

FIGURE 6.6
VERBAL WARNINGS AS PERCENTAGE OF TOTAL ENFORCEMENT ACTIONS
FOR SELECTED INDIVIDUAL TRAFFIC OFFICERS



- **steps be taken to ensure a consistent application of discretion by individual traffic officers. This may require guidance on those instances when a ticket or warning may be the more appropriate course of action.**

Other Observations

625 Capital Equipment

The operations of the branch require a fairly consistent level of capital expenditure. In 1985 and 1986, \$7.2 million (85 percent of the capital budgets) was applied to the purchase of 251 cars and 200 motorcycles. At August 1986 the branch had 458 cars and 346 motorcycles.

626 On average, vehicles are held for four years. The Departmental Motor Vehicle Committee in 1978–79 considered that vehicles used by the traffic force should be replaced after 80,000 kilometres for medium vehicles and after 100,000 kilometres for large vehicles (i.e., about every 3 years), due to the safety factors involved in the job. The Police have a similar replacement programme. The principal reason given for not achieving the replacement programme was the limitation on available funds.

627 To date, cost information relating to the acquisition of motor vehicles and maintenance costs has not been available to the management of the branch. To remedy this lack of information, a move to fleet cost recording has been instituted. Once adequate cost analysis is available, questions relating to type and mix of vehicles and frequency of replacement can be better evaluated.

628 Recommendation

- ♦ **The Division should review both the replacement programme and the mix of vehicles once detailed cost information is available.**

629 Identification of Offenders

During the audit it was evident that one of the most significant problems faced by traffic officers is the ability to clearly identify offenders and to obtain sufficient information for prosecution. As indicated in the next section on motor vehicle and driver licence records, there is significant inaccuracy in the records held. In these circumstances, it is extremely time consuming for a traffic officer to serve a summons or follow up on a default, because of the difficulty in locating many offenders. The information necessary to facilitate a successful prosecution is best obtained when the traffic officer first deals with the offender. However, the traffic officer has limited powers to obtain information from offenders if wrong information is intentionally supplied; the traffic officer's only recourse is to request Police assistance. We note that this matter is currently under Parliamentary review.

THE DIVISION'S RESPONSE TO SECTION 6

Paragraph 613: *The weekday patrol resource priorities are split between road safety, traffic management and heavy vehicle enforcement. When the "road safety" component is separated from the total patrol resource there is a closer relationship between the incidence of accidents and the level of patrol. The result is something like this:*

Percentage of "Road Safety" Patrol for selected time periods — Correlation with accidents

	WEEKDAYS		WEEKENDS		ALL WEEK	
	% Patrol	% Accidents	% Patrol	% Accidents	% Patrol	% Accidents
5am-6pm	42	44	17	16	64	60
6pm-Midnight	20	22	6	10	31	32
Midnight-5am	2	3	2	5	5	8
10am-4pm	33	19	9	5	53	28
10am-3pm	24	14	7	4	39	21

The above patrol is defined as "safety patrol". It is calculated by deducting time spent on road efficiency and heavy motor vehicle tasks. It is the patrol resource available to the Ministry to be deployed for road safety (accident deterrence) work.

The division will continue to ensure that there is the best possible match of resource allocation with high accident and traffic density times.

Paragraph 619: Traffic Officer activity records are currently under review with a view to providing an improved management system. As part of the review a study is being undertaken on an improved system of analysing patrol activity.

The branch will continue to develop measures of effectiveness by research studies and the monitoring of traffic enforcement development overseas. However, care is needed in developing models on which the number of enforcement contacts should be made on patrol. This could be seen as setting quotas by which the work of the officer is judged. The danger in this is that the quality of the enforcement suffers to meet the quantity demands of the system (particularly as minor offences of a trivial nature are generally more easily detected than those of a serious and accident-promoting character).

Paragraph 624: The enforcement branch has not placed emphasis on applying discretion in preference to issuing tickets. What it has said is that it should concentrate its enforcement effort into the more serious accident-promoting offences and traffic officers should exercise discretion and use warnings as an appropriate enforcement measure in dealing with minor and trivial breaches.

The Division agrees that there is need for further research and that the determination of the effects of a ticket versus a verbal warning is important. Other issues are also involved. For example the time saved in issuing a warning may allow an officer to stop several more motorists for similar types of offending. The time lost in issuing a ticket for a trivial breach may prove detrimental to the overall enforcement strategy of attaining maximum impact on driver behaviour.

The proper exercise of discretion can depend upon the road safety risk, the intent of the offender, the type and degree of the offence, or the conditions prevailing at the time. To gather this information on some 500,000 warnings issued annually in order to provide the monitoring system proposed would be difficult and costly.

The Ministry recognises the need for uniformity and consistency in the exercise of discretion and will formulate policy guidelines to assist its enforcement staff.

Paragraph 628: In 1986 a start was made to determine the most effective mix of motor vehicles and motorcycles to suit enforcement needs. This is an ongoing exercise that will include cost benefits in terms of vehicle performance and economy. Also an improved fleet management programme has been introduced and will serve to provide management with better information for vehicle replacement.

VEHICLE REGISTRATION AND DRIVER LICENSING

The Systems

701 It is essential for both enforcement and control purposes that adequate information is available to enable identification of who and what is licensed to use the road. Two information systems are maintained on the Wanganui computer which record details of drivers and vehicles respectively. The Post Office also maintains a vehicle register.

702 The drivers licence system provides a record of those people who have passed the competency test to drive a motor vehicle on the road. Currently, there are some 2 million licensed drivers. Each year, 79,000 new drivers are added. The system details which vehicle types the driver is authorised to use. Any restriction or disqualification is also recorded.

703 The motor vehicle system records ownership details of all vehicles registered for use on the road and for which the appropriate licence fee has been paid. There are 2.1 million motorised vehicles and 386,000 trailers. Approximately 150,000 new registrations occur each year.

704 While these systems are owned and maintained by the Ministry of Transport, it is not the sole user. The Police make approximately 6.3 million inquiries each year while MOT officers make 2.4 million inquiries.

Duplication of Systems

705 Two similar systems for motor vehicle registration are maintained, one by the MOT on the Wanganui computer and the other by the Post Office (Registrar of Motor Vehicles) at Palmerston North. There exists a high degree of duplication between the systems as shown in Figure 7.1.

FIGURE 7.1 MOTOR VEHICLE REGISTERS		
Information contained on the separate Motor Vehicle Registers maintained by the Ministry of Transport and the NZ Post Office.		
Type of Information	MOT	NZPO
Vehicle Registration Number	Yes	Yes
Vehicle Details		
— Colour	Yes	Yes
— Make/Model	Yes	Yes
— Engine/Chassis No.	Yes	Yes
Current Owner		
If individual		
— Name	Yes	Yes
— Residential Address	Yes	Yes
— Postal Address	Yes	Yes
If company etc		
— Registered Name	Yes	Yes
— Registered Office	Sometimes	No
— Place of Business	Yes	Yes
Previous Owners (last time updated)		
— Name	Yes	Yes
— Address	Yes	Yes
Vehicle of Interest (e.g., stolen vehicle)	Yes	No

706 The annual operating costs are estimated at \$2.5 million for the MOT system and \$6.5 million for the Post Office system.

707 The systems differ in the sources of information and the extent to which each is used for enforcement. The Post Office processes the annual registration and change of ownership notifications. These are then fed into the MOT system. However, the MOT system is also updated from information other than annual relicensing and changes in ownership. For example, an updated address following service of summons is able to be entered into the MOT system. The MOT system also identifies vehicles of interest for enforcement purposes (e.g., stolen vehicles) and is available seven days a week 24 hours a day. These differences do not appear sufficient to justify the existence of two separate systems.

708 To be useful as an enforcement tool, the MOT needs a system that:

- provides 24 hour, seven days a week availability,
- provides access through a distributed terminal network, and
- maintains privacy of information relating to individuals.

It is understood that the Post Office was not prepared to provide the first two capabilities and the two separate systems evolved as a result.

709 One significant constraint to merging the two systems is the restriction placed on access to any system maintained on the Wanganui computer. The general public can request information from the Post Office system but cannot obtain the same information from the MOT system. It is conceivable that appropriate limitations could be devised and installed within the Wanganui system to secure appropriate privacy of information while operating only one system. There are potential savings from integration of the two systems.

710 Recommendation

♦ Examination should be made to determine how the two motor vehicle registers can be merged. As the vehicle registration system is of prime benefit to enforcement agencies, responsibility for the combined system should rest with the Ministry of Transport. While there will be initial costs in developing a combined register, there is scope for significant annual savings.

Accuracy of Information

711 It is estimated that 1 in 9 summonses cannot be served because the offender cannot be found. It is essential, therefore, that the data contained in both the motor vehicle register and the drivers licence system is accurate.

712 Motor Vehicle Registration

Each year, the owner of every vehicle is required by law to obtain an annual licence (evidenced by a windscreen sticker) enabling that vehicle to be used on the road. This information is used to update the Motor Vehicle Register maintained by the Post Office and is subsequently used to update the MOT system. Notification of changes in ownership are similarly updated on the systems. From June 1986, the Post Office made the process more efficient by mailing out relicensing forms. Those owners who did not receive the form or did not wish to use it, had the option of applying directly to a Post Office. No check is performed on the accuracy of any information so supplied and the opportunity exists for wrong information to be recorded. With the mailed form the address is more likely to be correct as it will show receipt of the document. With adequate verification of the details provided annually by the owners of vehicles, the information contained on the Post Office system should be reasonably accurate.

713 Another weakness is that there is no requirement for a company's registered office to be recorded on the Register of Motor Vehicles maintained by the Post Office and consequently this information is not necessarily available on the MOT system. Incorrect business addresses result in more enquiry work which lessens the time available for traffic patrol. If it remains undetected that the given address is not that of the company's registered office, a prosecution

can fail. It is necessary that the register details addresses where legal documents can be served.

714 Driver Licensing

The driver's licence system is in a transitional phase. In future, the motor driver's licence will be issued for "life". The contact address for each driver will only be updated at time of issue of the new licence or after a prosecution. Otherwise there is no provision to keep the information on the system accurate. It is anticipated that with the provision of more personal details on the new "for life" licence, e.g. eye colour, birthdate etc, identification of offenders will be made easier. However, this benefit will be lost if there is no requirement to carry the licence when driving.

715 Another key problem in the enforcement process is subsequent location of offenders. The decision to cease updating drivers' addresses will not assist in remedying this problem. Options are available to facilitate update of drivers' addresses. One approach adopted overseas is to require a driver to notify each change of address. Other options are available, such as linkage to the update of the electoral roll. The decision to cease updating drivers' addresses needs to be reviewed. Furthermore, as the drivers licence system is not cross referenced to the motor vehicle system, the opportunity to benefit from the update of the latter system with an accurate address at least annually is also lost. It should also be recognised that, with the change in the Summary Proceedings Act enabling a Court to serve summonses by posting to a known residential address, it is important that accurate address details are recorded.

716 In summary, it is difficult for traffic officers to clearly establish that name and address details provided by offenders are correct. A driver is not obliged to carry a licence, the address details on the drivers licence system may be out of date and it is not easy to obtain related information from the motor vehicle system. The situation exists where an offender can deliberately mislead the officer. Currently, if traffic officers suspect false information, the only recourse is to obtain Police assistance. However, no restraint can be applied to the offender in the interim period until the Police arrive.

717 Recommendations

- ◆ **Tighter control should be instituted to ensure the accuracy of information supplied at the time of annual relicensing of vehicles or notification of changes in ownership.**
- ◆ **The function of the driver licensing system on the Wanganui computer system is to facilitate identification of drivers and where necessary provide sufficient information to enable subsequent prosecution steps to occur. The efficiency of the Division would be improved if drivers were required to carry their licence whenever driving and if traffic officers could detain offenders where they have good reason to suspect that information supplied is false.**
- ◆ **The decision to cease updating the drivers licensing system with address details should be reviewed.**
- ◆ **The vehicle and driver information bases should be cross-indexed, as is common practice overseas.**

THE DIVISION'S RESPONSE TO SECTION 7

Paragraph 710: *It is agreed that one register which will serve as a public record and as an enforcement aid is worthy of achievement.*

Recently approved legislation identifies the Secretary as the Registrar of Motor Vehicles, and, given that the technology is available to meet the privacy requirements of the Wanganui Computer Centre Act, the amalgamation can be achieved.

Paragraph 717: *The Ministry will examine with the Post Office ways of improving the accuracy of counter completed re-licensing applications.*

A provision in the Transport (Law Reform) Bill, if passed, will empower Ministry traffic officers to detain drivers where they have cause to suspect that information has been withheld or is false.

The alternative to requiring licences to be carried at all times (which would not be observed by the hard core group of offenders) is to improve communication from the roadside to the computer. That could be a more cost effective use of resources.

It should be noted that the proposed graduated licence scheme includes a special condition that licences for stages 1 and 2 are to be carried at all times.

The requirement in some overseas jurisdictions to notify change of address became too unwieldy and has been dispensed with. The difficulty in linking to other computer systems like the motor vehicle register or the electoral roll is that without date of birth there is no guarantee that records of the same name belong to one person.

Other options will be examined for feasibility and cost effectiveness. However, it should be noted that traffic officers, or summons service agents, have a variety of sources available to them, the most important of which is the information supplied at the roadside.

MAINTENANCE OF VEHICLE STANDARDS

Vehicle Safety Standards

801 The Division places significant importance on the maintenance of adequate vehicle standards and has stated:

“... the warrant of fitness programme is one of the Ministry's important accident prevention programmes. It is designed to ensure that the condition of vehicles using our roads is of the highest practicable standard.”

802 The Division is involved in the process of implementing vehicle safety standards in three ways:

- Exercising control and providing advice on vehicle safety, vehicle equipment, vehicle construction and modifications, including setting standards and regulations;
- Developing and implementing an inspection programme to ensure compliance with regulations and standards governing the mechanical safety and efficiency of road vehicles; and
- Enforcing standards and ensuring vehicles on the road comply with standards set.

803 The first two of these functions are the responsibility of the Automotive Survey branch of the Division. The Traffic Enforcement branch is responsible for ensuring that vehicles operating on the road do in fact comply with the standards set.

Vehicle Standards

804 The Automotive Survey branch currently applies approximately 5 percent of its resources towards improving vehicle standards and regulations. Recent moves to establish inspection and standards at point of manufacture and assembly are to be commended.

805 The inspection programme aims to ensure all vehicles are inspected six-monthly (with the exception of new cars which, from December 1985, require only an annual inspection for the first three years). There are two types of inspection:

- Certificate of Fitness (COF) for heavy goods and service vehicles, buses and taxis
- Warrant of Fitness (WOF) for all other vehicles

Are All Vehicles Inspected?

806 In September 1985 the Motor Trade Association had its members conduct a survey of vehicles subject to warrant of fitness which came into garages on a selected day. The results, shown in Figure 8.1, indicate that 5.9 percent of the vehicles surveyed did not display a warrant of fitness and 17.4 percent had expired warrants of fitness. While the survey was not scientifically rigorous and occurred around the time that some of the Ministry's WOF stickers were falling off, the results nevertheless indicate that a number of vehicles operate without current warrants of fitness.

FIGURE 8.1
MTA SURVEY: STATUS OF WARRANTS OF FITNESS FOR VEHICLES
ENTERING GARAGE FORECOURTS ON 20 SEPTEMBER 1985

	<i>Vehicles Surveyed</i>	<i>No Warrant</i>		<i>Expired Warrant</i>	
			<i>%</i>		<i>%</i>
Auckland (North Shore)	1,021	64	6	199	19
Auckland (South Auckland)	982	72	7	256	26
Hamilton	273	8	3	31	11
Wellington	616	27	4	75	12
Christchurch	420	28	7	40	10
Dunedin	188	10	5	10	5
	<u>3,500</u>	<u>209</u>	<u>6</u>	<u>611</u>	<u>17</u>

807 Similarly, a review of vehicles subject to COF inspection showed an 8.5 percent discrepancy between the number of registered vehicles and the number reported as having been inspected by the Ministry. It therefore appears that a significant number of vehicles operate without a valid warrant or certificate of fitness. This undermines the benefits of the inspection programme.

808 One technique adopted overseas is the requirement that the owner must present a recent inspection certificate before relicensing a vehicle each year. This ensures that every vehicle undergoes at least an annual inspection. The Division indicated its awareness of the problem as early as April 1985 and has been considering implementing a similar approach. The Post Office has indicated its willingness to co-operate.

809 Recommendations

- ◆ **The Division needs to improve its monitoring of the coverage achieved by the vehicle inspection programme.**
- ◆ **The Division should implement a programme which ensures all vehicles are inspected annually. One approach would be to require a valid vehicle inspection certificate before relicensing a vehicle.**

Who Performs the Inspections?

810 Differing responsibilities exist for conducting COF and WOF inspections.

811 COF inspections are performed almost entirely by the Division's vehicle testing stations. The quality of inspections performed on heavy goods and service vehicles, buses and taxis can be considered fully the responsibility of the Ministry.

812 However, the responsibility for the WOF inspection programme is diffused. No one person or body is responsible to ensure that vehicle testing is conducted to an adequate standard throughout the country. Local authorities can choose to operate their own vehicle testing stations and, until recent policy changes, could establish a zone of operations wherein they were the sole inspecting agency. In all other cases, the Minister of Transport and the Secretary for Transport are empowered by regulation to determine who shall conduct WOF inspections. While some inspections are performed at MOT testing stations, approximately 2,500 garages also perform inspections.

813 It is estimated that WOF inspections are currently conducted in the following proportions:

	<i>%</i>
Ministry of Transport	13
Local Authorities	17
Private Garages	<u>70</u>
	<u>100</u>

Maintaining the Quality of Inspections

814 Since administering a vehicle inspection programme is one of the Division's important road accident prevention programmes, the Division should ensure that a common inspection standard is applied. In September 1986 the Government approved a major review of WOF policy which redefined the Ministry's prime role; it is now responsible for setting and monitoring vehicle safety standards.

815 The Division has recently developed training and inspection programmes in respect of its own testing stations.

816 Where authority to issue WOFs has been given to private garages, the inspection of those garages should occur annually. In the year to February 1986 only 71 percent were inspected. The inspection is limited to establishing whether or not the garage has the necessary equipment and that appropriately qualified personnel are employed. The Division considers that it does not have the power to enter premises and reinspect a vehicle to ascertain the quality of inspections.

817 The only other control available to the Division is the prosecution of a garage for knowingly issuing a WOF where one should not have been issued. However, no prosecution has succeeded against garages in the last five years due to an inability to prove that the defects existed at the time of issue of the WOF. Owing to the difficulty in obtaining the requisite evidence this option has fallen into disuse. In effect, the right to issue warrants of fitness is never withdrawn once it is granted.

818 Local authorities can conduct vehicle inspections in their own right. No statutory provision is available to enable independent review to ensure that those inspections are carried out to an adequate standard. The recourse of prosecution in the circumstances described above is the only quality control the Division can exercise on these inspection agencies but is equally ineffective.

819 It is difficult to assess whether all vehicles are being inspected to the same standard. An examination of records at three testing stations showed the following extent of divergence in rejection rates:..

	%
Auckland City (Local Authority)	22-24
Wanganui City (Local Authority)	34-40
Levin (MOT)	42

No similar information was available for private garages. The range of rejection rates, however, suggests significant variation in the consistency of application of the vehicle standards.

820 As part of the policy changes approved by the Government in September 1986, the Ministry is required to take a more active role in ensuring all vehicle inspections are carried out to standard. The Division is currently implementing the new policy and this, hopefully, will address the problem of maintaining the quality of inspections.

821 Recommendations

♦ **The Ministry of Transport should be made responsible by statute to ensure the quality and standard of the vehicle inspection programme for motor vehicles in New Zealand.**

♦ **The Secretary for Transport should be made responsible for the delegation of all rights to issue warrants of fitness on such terms and for such periods as are considered necessary to maintain standards.**

Vehicles on the Road

822 Regular vehicle inspection is intended to ensure vehicles are operated up to WOF standard. The survey results in Figure 8.1 suggest there could be up to 23 percent of vehicles operating without a current fitness certificate. Each year approximately 50,000 vehicles (only 2 percent of all vehicles) are subject to tickets for WOF deficiencies. The difference between these figures indicates that many vehicles may operate without a valid WOF.

823 Analysis of the 1984 accident statistics suggests that vehicle defects are a contributing factor in approximately 5 percent of accidents. By comparison, a similar analysis of United Kingdom accidents puts the figure at 8.5 percent.

824 Handling WOF offences is generally considered a lower priority by traffic officers. The practice of the enforcement branch is not to issue infringement notices for multiple offences but rather to issue only for the more serious offence. Furthermore, some traffic officers believe that fining a vehicle owner for a WOF defect uses funds much better applied to rectifying the defect. As a result, WOF offences are often dealt with by verbal warnings.

825 The standard fine for a WOF defect is currently \$25. If this is compared to the cost of repairing brakes or replacing tyres, the potential penalty is significantly lower than the cost of the remedy. Consequently, vehicle owners may be willing to risk receiving an offence notice for operating a defective vehicle.

826 It would appear that enforcement activity does not fully supplement the vehicle inspection programme by ensuring all vehicles are inspected and maintained to a standard between inspections. One must question whether the vehicle inspection programme is achieving the desired outcome and whether current efforts could be better directed.

Are Alternative Approaches Available?

827 One of the aims of the Division is to have vehicle defects rectified. One approach would be to require the vehicle owner to demonstrate that the defect has been remedied. When a defect is detected, the enforcement officer should issue an infringement notice in all cases. This notice would require the vehicle owner to rectify the defect and then show evidence of remedy to the Ministry or incur a substantial fine. The level of fine has to be such that the owner will find the option of making the repair attractive.

Summary

828 The WOF programme which is aimed at ensuring vehicles are maintained to a safe standard is not effective. There are a number of weaknesses.

- Not all vehicles are inspected within the prescribed period.
- Those that are inspected are not done to the same standard, and the MOT has not been able to successfully prosecute the owners of garages that do inadequate inspections. (In September 1986, the Government made the MOT responsible for setting and monitoring vehicle safety standards. The Division is presently implementing the new policy which will, hopefully, address the problem of maintaining the quality of inspections).
- WOF offences are often handled as verbal warnings.
- Only 2 percent of vehicles receive a ticket for a WOF offence while various studies indicate that up to 23 percent of vehicles could be operating without a valid WOF.
- The \$25 standard fine provides little incentive to maintain vehicles to a safe standard.
- In those cases where an offender is fined, there is still no requirement for the individual to rectify the defect.

The WOF programme costs vehicle owners approximately \$20 million in fees and probably at least that much in owners' time taking vehicles for inspection. None of the

foregoing weaknesses are substantial but their cumulative effect is that there is no assurance that all vehicles are being maintained to a safe standard and that defects, if identified, are rectified.

829 The COF programme, by comparison, is working well because a more stringent approach has been adopted. Inspection times are scheduled for each vehicle and problems are monitored over time.

830 Recommendations

- **Procedures should be implemented to ensure that any enforcement action results in correction of vehicle defects.**
- **Fines should be sufficiently high that vehicle owners will choose to correct defects.**

THE DIVISION'S RESPONSE TO SECTION 8

Paragraph 809: *The Ministry has been examining for some time the feasibility and cost effectiveness of making motor vehicle relicensing subject to the production of a roadworthiness certificate. The proposal was deferred initially whilst the Post Office was computerising the Motor Vehicle Register. That was completed in 1986 and the Post Office has since indicated its willingness to develop a system in conjunction with the Ministry.*

A recent economic report has questioned the cost effectiveness of the proposal and that has become the focus of further discussion.

Paragraph 821 and previous paragraphs: *There was a major Divisional review of Warrant of Fitness policy in 1985. The deficiencies in the present system were identified and Cabinet last year agreed to make a number of significant changes to make the system more effective. The major one was to redefine the role of the Ministry of Transport in the Warrant of Fitness market to that of setting and monitoring of standards.*

The two recommendations under 821 are components of a package which is being implemented to give effect to the Cabinet decision.

Paragraph 830: *The summary in 828 has highlighted the deficiencies of the WOF system which the Division is now addressing following the Cabinet decision last year to redefine the Ministry's role in this area. The evidence available does not support the statement that this has a lower priority for enforcement. The issue of some 50,000 tickets in 1985 for warrant of fitness breaches would indicate that traffic officers take more than a passing interest in this type of offending.*

In respect to the first recommendation there is a high administrative cost in implementing a system whereby the correction of vehicle defects can be monitored by the enforcement agency concerned. The Ministry has studied a similar scheme operated by the Nottinghamshire Constabulary in the United Kingdom. While there seem to be some benefits it has still not been determined whether these would be outweighed by the difficulties and cost of a similar scheme in New Zealand. However, in the light of the recommendation the Division will examine this matter further as it sees this as a positive method of dealing with vehicle defects.

The Division supports the second recommendation. The Transport (Law Reform) Bill presently before the House includes an upward adjustment for infringement fees for WOF offences.

The previous special report published this year was:
Electrical Supply Authorities: Local Hydro-electric Power Schemes, February 1987.