

NATIONAL ROAD TRANSPORT COMMISSION

DRIVER LICENSING REQUIREMENTS AND PERFORMANCE STANDARDS INCLUDING DRIVER AND RIDER TRAINING

For Information

May 2000

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DELIVERING AUSTRALIAN ROAD TRANSPORT REFORM

656.09 CHR

NRTC MISSION

To contribute to Australia's economic, social and environmental future by playing the lead role in developing and coordinating road transport reform in Australia.

OBJECTIVES AND ROAD TRANSPORT REFORM PROCESS

The National Road Transport Commission was established in 1991 by the unanimous agreement of all Heads of Government. The NRTC works in close partnership with the road freight and passenger sectors, governments, transport agencies, police, motoring and other organisations to develop practical reforms which:

- make road transport and road use more innovative, efficient and safer;
- introduce greater national transport uniformity and consistency;
- reduce the environmental cost of road transport; and
- reduce the costs of administration of road transport.

Recommendations are made to the Australian Transport Council, comprising Transport and/or Roads Ministers for each of the Commonwealth, States and Territories. Once approved, the NRTC coordinates the introduction of reforms on-the-ground by transport and other agencies and the transport industry, and monitors the results.



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For Information

May 2000

Prepared by: Dr Ron Christie RCSC Services Pty Ltd





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National Road Transport Commission

Driver Licensing Requirements and Performance Standards Including Driver and Rider Training

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ISBN 0 642 54468 1

REPORT OUTLINE

Date:	May 2000
ISBN:	0 642 54468 1
TITLE:	Driver Licensing Requirements and Performance Standards Including Driver and Rider Training
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Type of report:	Discussion paper
Objectives:	Improve Road Safety
NRTC Programs:	F - Safety
Key Milestones:	None

Abstract: Under its charter, the NRTC may only address certain issues in respect of light vehicles if significant net benefits can be demonstrated. Driver licensing requirements and performance standards for light vehicles are included in this category.

Developing, adopting and operating nationally uniform approaches to driver licensing assessment and associated training has the potential to improve validity, reliability and equity, and may also contribute to reduced crash risk and reduced operational costs. Conclusions resulting from the review of current arrangements include:

- There appears to be little uniformity in driver licence testing and assessment across Australia. Revisions and changes are not made on a national basis.
- Few on-road tests in use in Australia or overseas have been subjected to empirical evaluation during their development or following their introduction. Additionally, there have been few comparative evaluations of driver licence test/assessment components or related training programs and materials used in Australia.
- Driver licensing standards largely determine what licence applicants will learn and what training and educational materials are provided.
- Common approaches to the assessment and preparation of drivers across Australia would increase the size of the consistently trained/assessed driver and rider pool and potentially the ability to assess the road safety, efficiency and effectiveness of procedures and initiatives.

Driver licensing authorities may use this report, when reviewing or evaluating their existing driver licensing assessment and training arrangements, to consider the potential benefits of a nationally uniform approach.

Purpose:	For information
Key words:	driver licensing, driver training, licence testing, driver assessment

FOREWORD

The National Road Transport Commission (NRTC) is an independent body responsible for developing uniform or consistent arrangements for the regulation of road transport in Australia.

The NRTC's national driver licensing policy, approved by the Australian Transport Council, will be implemented throughout Australia by early 2001. While the policy will deliver greater consistency in most aspects of the licensing process, driver training or licence testing performance standards were not addressed as part of this initial work.

The Light Vehicles Agreement signed by Heads of Government in 1992 assigns a number of specific tasks to the NRTC in respect of light vehicles. Some are identified as priority tasks, some as monitoring tasks, and some as issues only to be addressed if significant net benefits can be demonstrated. Driver licensing requirements and performance standards for light vehicles, including driver and rider training, are included in this last category.

The consultant's task for this report was to investigate the benefits in developing a nationally consistent driver education, training and assessment framework for light and heavy vehicle drivers by:

- identifying present variations in approaches to training and assessment throughout Australia; and
- providing an assessment of benefits in developing a national standard for driver education, training and assessment.

Please note: the information in this report should be considered current as at August 1999.

SUMMARY

Background

The National Road Transport Commission's (NRTC) policy proposal for a national driver licensing scheme has been approved by Australia's Transport Ministers and will be fully implemented by early 2001. The scheme will ensure that the key administrative licensing transactions are consistent throughout Australia. The policy also establishes a six-tier licence classification structure from Car through to Multi-combination vehicle licences.

The NRTC has not, however, focused on developing licence testing, curricula or standards, or driver training in general. Driver standards are the basis of entry to (and expulsion from) the licensing system, and can be used to measure a driver's competence to continue to drive. The standards expected of a driver are those required to safely control a vehicle (largely dependent on physical and mental skills) and those related to driving behaviour or attitudinal characteristics. Higher standards of driving skill are required as the mass and dimension of vehicles increase.

In Australia, each State and Territory has developed its own theory and practical testing procedures, often in isolation and, in some cases, employing subjective methods of assessment against vaguely defined criteria.

Project Aim

This project was undertaken to determine whether there are net benefits in a nationally uniform approach to driver education, training and testing, in order to assist the NRTC in deciding whether to pursue the development of such a national approach.

Accordingly, the NRTC engaged Dr Ron Christie of RCSC Services Pty Ltd, to undertake the following tasks during the period April –June 1999:

- provide an overview of the range of the existing driver testing and assessment arrangements used throughout Australia;
- review any available studies of the comparative effectiveness of the various practices; and
- provide advice as to whether there are benefits in developing a national standard.

Project Approach

In undertaking the project, the consultant addressed these issues and also provided some indication of approaches taken (and likely to be taken) in driver education, training and testing in comparable overseas jurisdictions such as the United States of America (USA), Canada, New Zealand and the United Kingdom (UK). This provided an opportunity to identify elements of "best practice" within Australia and overseas.

All driver licensing authorities in Australia completed and returned a survey on driver licensing assessment requirements, covering theory/knowledge tests, on-road tests and off-road assessment and related educational and training resources in respect of all driver licence classes. A similar survey on training provided in support of driving licensing assessment was also completed by a sample of driver training bodies including the Australian Driver Trainers' Association, Australian Rider Trainers' Association, the Driver Education Centre of Australia and the Transport Training Centre (South Australia).

Conclusions

The results of the collation and analysis process in respect of driver licensing requirements and performance standards, including driver and rider training, suggest the following conclusions:

Existing driver testing and assessment arrangements used throughout Australia

1. There appears to be little uniformity in driver licence testing and assessment across Australia - no two systems are the same. Tests vary in duration, complexity, and scoring arrangements.

In general, licence tests tend to be high on face validity, but have little predictive validity, which limits their value as road safety measures.

- 2. Driver licensing testing requirements tend to be a mix of what is desirable in competency and safety terms, what is achievable in respect of educational and human developmental capacity, tempered by the reality of what the community and individual governments will accept as reasonable.
- 3. Revisions and changes to testing and assessment are not made on a national basis, but rather in response to jurisdictional dictates, resulting in individual jurisdictions falling along a continuum of development, with some often leading and others following sometimes years later.
- 4. Driver licensing standards largely determine what licence applicants will learn and what training and educational materials are provided licensing standards drive training standards, not the other way round.
- 5. Driver training in itself has little value unless it addresses the development of competencies that must be achieved for licence qualification (or employment in the case of truck and bus drivers). There is little motivation or incentive for candidates for any class of driver licence to learn more than that required to gain a licence, permit or other certificate.

Comparative effectiveness of the various practices

- 6. There have been few comparative evaluations of driver licence test/assessment components used in Australia or related training programs and materials.
- 7. Few on-road tests in use in Australia or overseas have been subjected to empirical evaluation during their development or following their introduction. NSW, SA, NT

(in part) and Victoria employ on-road tests based on psychometrically developed and evaluated models (ie the ADOPT and TORQUE¹). These tests approximate best practice and are based on fair and reliable models, but have little predictive validity in crash reduction terms. New tests introduced into WA (1999) and Queensland (1998) are yet to be evaluated.

- 8. The Hazard Perception Test appears to be a driver assessment technique with the potential to reduce novice driver crashes Victorian research suggests that it is reliable and, unlike other driver licensing tests, has predictive validity.
- 9. There is little scientific evidence that competency based training and assessment (CBTA) programs produce safer and more proficient drivers than competency based assessment (CBA) systems. CBTA appears to increase costs for applicants for no apparent gain other than a community perception (misconception) that the novices trained and licensed under CBTA are somehow superior to those who undergo licence assessment only via CBA. Competency standards are the same under CBA and CBTA.²

Benefits in developing a national standard

- 10. There would seem to be considerable scope for national uniformity and common approaches to the assessment, and perhaps preparation of drivers across Australia. In particular, there is room for improvement in the efficiency and effectiveness of driver assessment.
- 11. Best practice in driver licensing assessment cannot be achieved by each jurisdiction going its own way in respect of test development and the production of related training programs and materials there cannot be eight best ways of licensing drivers.
- 12. There may be some small economic, administrative and safety benefits to be gained in adopting a uniform approach to the production of licence manuals and associated knowledge theory tests. The advent of the Australian Road Rules may provide a common starting point for such a process.
- 13. Adoption of a uniform, national approach to driver/rider training and licensing assessment would increase the size of the consistently trained/assessed driver and rider pool and would correspondingly increase the likelihood of being able to assess the road safety, efficiency and effectiveness of procedures and initiatives.

¹ "Automobile Driver On-Road Performance Test" and "Transport Operators Qualification Examination". Refer 3.5.1.

² Stand-alone competency based assessment (CBA) is where each competency to be assessed is specified in measurable, behavioural terms with a candidate's performance assessed as having met the competency or not met the competency (ie *Yes* or *No*).

Competency based training and assessment (CBTA) is a training course where progress and assessment are recorded in a log book. Once all competencies have been achieved and duly recorded, the completed log book is presented to the licensing authority and a driver licence is issued on the strength of this, without further assessment.

- 14. Consistency may provide better opportunities for drivers to be assessed anywhere with certificates of competency that are recognised in all jurisdictions for licensing purposes.
- 15. The extent to which individual Australian jurisdictions are sufficiently motivated to develop, adopt and operate nationally uniform approaches driver licensing associated training is unknown.

Recommendations

Given that the development and adoption of national standards in respect of driver licensing assessment have the potential to improve validity, reliability and equity, and may also contribute to reduced crash risk and reduced operational costs, it is recommended that this report be used to:

- Determine the level of interest among individual Australian jurisdictions in developing, adopting and operating nationally uniform approaches to driver licensing assessment and associated training.
- Highlight areas of potential benefit in developing, adopting and operating nationally uniform approaches to driver licensing assessment and associated training in discussions with driver licensing authorities.

ACKNOWLEDGEMENTS

The author wishes to acknowledge the valuable assistance of the driver licensing authorities and driver/rider training bodies across Australian jurisdictions. The project could not have been completed without their co-operation and advice. The particular assistance of Mr Eddie Schubert of the VicRoads library in obtaining reference material is appreciated.

CONTENTS

1	INTRO	DUCTION	1
1.1 Background			1
1.2 Objective			1
	1.3 Sco	ре	1
	1.4 The	Project Report	1
r	OVED	/IEW OF EXISTING DRIVER TESTING AND ASSESSMENT	
2. OVERVIEW OF EXISTING DRIVER TESTING AND ASSESSMENT ARRANGEMENTS USED THROUGHOUT AUSTRALIA			3
		cground	
		er Licence Testing and Assessment Arrangements across Australian	-
		sdictions	4
		Theory/Knowledge Tests	
	2.2.2	On-Road Practical tests Off Road Practical Tests	
		ments on Driver Licence Testing and Assessment Arrangements Across	•
		tralian Jurisdictions	8
	2.3.1		
	2.3.2	Limited Adoption of Austroads Draft Novice Driver Competencies and the Rise of CBA and CBTA	
	2.3.3		0
		Equity	9
		cluding Comment on Driver Licensing Testing and Assessment Arrangements	_
	Acro	oss Australian Jurisdictions 1	0
3	REVIE	W OF AVAILABLE STUDIES OF THE COMPARATIVE	
3	EFFEC	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1	
3	EFFEC		
3	EFFEC 3.1 Bac 3.2. The	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 Aground 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and	1
3	EFFEC 3.1 Back 3.2. The Lim	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES	1
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations 1 The Purposes and Roles of Driver Licensing 1	1 1 1
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 tcground. 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing. 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1	1 1 1 2
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground	1 1 2 3
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground. 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing. 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for 1	1 1 2 3 4
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4.1	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground. 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing. 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants. 1	1 1 2 3 4
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground	1 1 2 3 4 5
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4.1 3.4.2	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground. 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing. 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants. 1 Evolution and Limitations of Driver/Rider Handbooks 1 The Apparent Road Safety Value of Traffic Law Knowledge. 1	1 1 1 2 3 4 5 5
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4.1 3.4.2 3.4.3 3.4.4 3.5 Prac	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing. 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants. 1 Evolution and Limitations of Driver/Rider Handbooks 1 The Apparent Road Safety Value of Traffic Law Knowledge. 1 Concluding Comment on Knowledge Tests and Related Handbooks 1 tical On-Road Testing and Training 1	1 1 1 2 3 4 5 5 6 7
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4.1 3.4.2 3.4.4 3.5 Prac 3.5.1	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 cground 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants. 1 Evolution and Limitations of Driver/Rider Handbooks 1 The Apparent Road Safety Value of Traffic Law Knowledge 1 tical On-Road Testing and Training 1 Development and Evaluation of On-Road Driver Licence Tests 1	1 1 1 2 3 4 5 5 6 7 8
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4.1 3.4.2 3.4.3 3.4.4 3.5 Prac	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 transmission 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing. 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants. 1 Evolution and Limitations of Driver/Rider Handbooks. 1 The Apparent Road Safety Value of Traffic Law Knowledge. 1 Concluding Comment on Knowledge Tests and Related Handbooks 1 Development and Evaluation of On-Road Driver Licence Tests. 1 Development and Evaluation of On-Road Tests: The Californian Driver Performance Evaluation 1	1 11234 455678 9
3	EFFEC 3.1 Bac 3.2 The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4 Kno 3.4.1 3.4.2 3.4.3 3.4.4 3.5 Prac 3.5.1 3.5.2 3.5.3	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 transmission 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing. 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants. 1 Evolution and Limitations of Driver/Rider Handbooks 1 The Apparent Road Safety Value of Traffic Law Knowledge. 1 Concluding Comment on Knowledge Tests and Related Handbooks 1 Development and Evaluation of On-Road Driver Licence Tests. 1 Development and Evaluation of On-Road Tests: The Californian Driver Performance Evaluation 1 Development and Operation of Motorcycle Rider Tests 2	1 11234 455678 e90
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4.1 3.4.2 3.4.3 3.4.4 3.5 Prac 3.5.1 3.5.2 3.5.4	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 transmission 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and litations 1 The Purposes and Roles of Driver Licensing 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants 1 Evolution and Limitations of Driver/Rider Handbooks 1 The Apparent Road Safety Value of Traffic Law Knowledge 1 Concluding Comment on Knowledge Tests and Related Handbooks 1 Development and Evaluation of On-Road Driver Licence Tests 1 Development and Evaluation of On-Road Tests: The Californian Driver Performance Evaluation 1 Development and Operation of Motorcycle Rider Tests 2 Concluding Comment Regarding On-Road Tests 2	1 11234 455678 e900
3	EFFEC 3.1 Bac 3.2. The Lim 3.2.1 3.2.2 3.3 Com 3.4 Kno 3.4.1 3.4.2 3.4.3 3.4.4 3.5 Prac 3.5.1 3.5.2 3.5.4	TIVENESS OF THE VARIOUS ASSESSMENT PRACTICES 1 taground 1 Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and itations. 1 The Purposes and Roles of Driver Licensing 1 Influences, Expectations and Limitations of Driver Licensing Assessment 1 parative Effectiveness of Various Driver Testing/Assessment Practices 1 wledge Testing and Driver Licence Manuals 1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants. 1 Evolution and Limitations of Driver/Rider Handbooks 1 The Apparent Road Safety Value of Traffic Law Knowledge. 1 Concluding Comment on Knowledge Tests and Related Handbooks 1 Development and Evaluation of On-Road Driver Licence Tests. 1 Development and Evaluation of On-Road Tests: The Californian Driver Performance Evaluation 1 Development and Operation of Motorcycle Rider Tests 2 Concluding Comment Regarding On-Road Tests: 2 Concluding Comment Regarding On-Road Tests 2 Concluding Comment and Evaluation of Motorcycle Rider Tests 2 Concluding Comment Regarding On-Road Tests 2 Concluding Comment Regarding On-Road Tests 2	1 11234 455678 9001

		3.6.3	Concluding Comment on Off-Road Rider Training and Assessment	. 23
	3.7	Hazan 3.7.1	rd Perception Testing Development and Evaluation of Hazard Perception Testing in Victoria	
		3.7.2	Concluding Comments on Hazard Perception	
	3.8	Comp	petency Based Training and Assessment (CBTA)	25
		3.8.1	Evaluation of CBTA in SA	. 26
		3.8.2	Comparison of CBTA and CBA in SA with Novice Driver Outcomes in NSW	
		3.8.3	Concluding Comments on CBTA	28
4	BE	NEFI	TS IN DEVELOPING A NATIONAL STANDARD	29
	4.1	Back	ground	29
-			tial Crash-Reduction Benefits	29
4.3 Potential Efficiency and Effectiveness Benefits4.4 Potential Benefits of Improved Validity, Reliability and Equity				30
				32
	4.5	Conc	luding Comments on Benefits of Developing National Standards for Driver	
		Licen	nsing Requirements and Performance Standards	33
5	0\	ERA	LL CONCLUSIONS AND RECOMMENDATIONS	35
	5.1	Conc	lusions	35
		5.1.1	Existing driver testing and assessment arrangements used throughout Australia	. 35
		5.1.2	Comparative effectiveness of the various practices	
		5.1.3	Benefits in developing a national standard	. 36
	5.2	Recor	mmendations	37
R	REFERENCES			
A	PPE	ENDIX	KA COLLATED SURVEY RETURNS ON DRIVER LICENSING REQUIREMENTS AND ASSOCIATED TRAINING	3

TABLES

1 INTRODUCTION

1.1 Background

The NRTC's policy proposal for a national driver licensing scheme has been approved by Australia's Transport Ministers and will be fully implemented by early 2001. The scheme will ensure that the key administrative licensing transactions are consistent throughout Australia. The policy also establishes a six-tier licence classification structure from Car through to Multi-combination vehicle licences.

The NRTC has not, however, focused on developing licence testing, curricula or standards, or driver training in general. Driver standards are the basis of entry to (and expulsion from) the licensing system, and can be used to measure a driver's competence to continue to drive. The standards expected of a driver are those required to safely control a vehicle (largely dependent on physical and mental skills) and those related to driving behaviour or attitudinal characteristics. Higher standards of driving skill are required as the mass and dimension of vehicles increase.

In Australia, each State and Territory has developed its own theory and practical testing procedures, often in isolation and, in some cases, employing subjective methods of assessment against vaguely defined criteria.

1.2 Objective

This project aimed to determine whether there are net benefits in a nationally uniform approach to driver education, training and testing, in order to assist the NRTC in deciding whether to pursue the development of a national standard.

1.3 Scope

To meet the project objective, the NRTC required the consultants, RCSC Services Pty Ltd, to undertake the following tasks:

- provide an overview of the range of the existing driver testing and assessment arrangements used throughout Australia;
- review any available studies of the comparative effectiveness of the various practices; and
- provide advice as to whether there are benefits in developing a national standard.

In undertaking the project, the consultant addressed these issues and provided some indication of approaches taken (and likely to be taken) in driver education, training and testing in comparable overseas jurisdictions such as the United States of America (USA), Canada, New Zealand and the United Kingdom (UK). This provided an opportunity to identify elements of "best practice" within Australia and overseas.

1.4 The Project Report

The report sets out the consultant's findings, which include conclusions about the extent that net benefits would result from a nationally uniform approach to driver education, training and testing, and the merits of the NRTC pursuing the development of a national standard. Recommendations flowing from these conclusions regarding future action, research and policy are also made.

2. OVERVIEW OF EXISTING DRIVER TESTING AND ASSESSMENT ARRANGEMENTS USED THROUGHOUT AUSTRALIA

2.1 Background

The consultant collected, collated and reviewed information on the current entry level requirements and testing procedures for all driver licences classes in all jurisdictions. To achieve this, all Australian driver licensing jurisdictions were contacted and asked to complete a survey regarding current entry level requirements and testing procedures for all classes of licence. A version of this survey was also sent to driver education/training bodies (eg Australian Driver Trainers Association, Driver Education Centre of Australia, Transport Training Centre, SA). The NRTC's project manager had the opportunity to comment upon and amend these surveys before distribution in mid April 1999.

Following collation of survey returns, the consultant also discussed these requirements, including exemptions and anomalies, with key officers from these jurisdictions. Key contacts in each jurisdiction were also asked to describe and, provide relevant materials on, anticipated changes to current entry level requirements and testing procedures.

The range and nature of driver licence assessment considered included knowledge testing in respect of road law, in-vehicle competency based assessment, on-road/off-road, and hazard perception assessment. Differences that exist in respect of different classes of licence were also considered, together with exemptions and policies applied in remote areas.

Linkages of driver testing procedures to education/training courses, programs and published materials (eg videos, audiotapes, manuals and handbooks) were also explored in respect of all licence classes across Australian jurisdictions. Where possible and available, the consultant obtained documentary and evaluatory materials from licence jurisdictions, training and education providers. Linkages between driver education/training and licence assessment were also explored with key representatives of peak bodies or significant providers (eg Australian Driver Trainers Association, Driver Education Centre of Australia, Transport Training Centre, SA).

Transport industry representatives were also consulted about the existing driver testing and assessment arrangements used throughout Australia. This consultation was conducted via the consultative bodies already established and/or accessed by the National Road Transport Commission (NRTC). Members of these groups were circulated with copies of a summary of the project report for information and comment.

A series of summary tables which detail the current entry-level requirements and testing procedures for all licence classes in all jurisdictions follow below (see Appendix A). These are accompanied by a discussion and exposition of relevant requirements, principles and procedures with a view to identifying similarities, differences and anomalies across jurisdictions. Anticipated changes to current practices and linkages between assessment procedures and the provision of driver education/training services or resources are also identified.

2.2 Driver Licence Testing and Assessment Arrangements across Australian Jurisdictions

Survey returns were received from all Australian driver licensing jurisdictions. Returns in respect of training support provided by driver trainers were received from the Driver Education Centre of Australia (DECA), Transport Industry Training Centre (SA), Honda Australia Rider Training (HART), Australian Rider Trainers' Association (ARTA) and from Australian Driver Training Associations (ADTAs) in NSW and ACT. Though invited to provide a return, no material was received from ADTAs in Victoria, WA, or Queensland.

Collated information on licensing requirements in each jurisdiction, including associated training resources and programs may be found at Appendix A It should be noted that information from driver training provider groups was integrated with the driver licensing information summarised in Appendix A to provide a single collation.

Examination of the contents of Appendix A shows some commonality across jurisdictions, but also areas of difference. These are summarised below:

2.2.1 Theory/Knowledge Tests

- All jurisdictions use theory/knowledge tests at learner permit/licence level most are of written, multiple choice format, with NSW and Victoria the only jurisdictions to use computerised approaches for all tests (Tasmania has a computerised car/motorcycle theory test only).
- The length of theory/knowledge tests for learner permit applicants varies from 30 questions (ACT, NT, Queensland, Tasmania and WA) to 32 in Victoria, 45 in NSW and 52 in SA. The pass mark ranged from 80-90% with 80% being the most common.
- Not all jurisdictions require separate theory tests for motorcycle or heavy vehicle class applicants some such as Victoria and NSW did while others like Queensland use a base test with additional specialist questions for motorcyclists or heavy vehicle applicants.
- While theory/knowledge tests covered traffic law in all jurisdictions, only four or five jurisdictions included questions on safe driving practices applicable to particular licence classes.
- SA offered the largest range of written knowledge tests in languages other than English (20) while Queensland, Tasmania and WA provided written tests in English only. All jurisdictions provided access to interpreter assisted testing.
- Most jurisdictions introduced or revised their written knowledge tests within the last ten years. Most indicated that tests were revised regularly or on an ongoing basis and were produced in-house with few enlisting the assistance of external professional test developer's.

- Only ACT and Victoria claimed to have evaluated their knowledge tests in validity, reliability or road safety terms. No reports/results could be supplied by those jurisdictions.
- With the exception of NT, all jurisdictions keep theory/knowledge test questions confidential.
- The number of written test versions available in a jurisdiction varied from only one to six. Two to four versions for learner permit tests was typical; the lowest number of test versions related to heavy vehicle classes.
- There was no consistency in charges for written tests. Costs ranged upwards from \$12.00 (Victoria) to \$15.50 in SA, while ACT, NSW, NT, Queensland, Tasmania and WA made no specific charge or incorporated the cost into a permit/licence application fee. Estimates of the proportion of costs recovered in respect of knowledge/theory tests ranged from 0 to 100%.
- All jurisdictions except NT produce manuals/handbooks on road law for applicants. Only a few such as NSW and Victoria produce separate specialist handbooks for car, motorcycle and heavy vehicle applicants. Handbook costs range from nil (free or included in application costs) to \$7.50 (Victoria's heavy vehicle handbook).
- Victoria provides a videotape version of the Victorian Traffic Handbook (\$29.95) and audiotape versions of car, motorcycle and heavy vehicle handbooks (\$10.00). ACT, SA and NT provide web sites, NSW sample versions of tests on floppy disk, NT free theory lessons (funded by Territory Insurance office), and Tasmania assistance via school-based programs.
- No jurisdiction indicated that it has evaluated the educational or road safety effects of manuals, videos or tapes provide to assist applicants with theory/knowledge tests. The reading age of some manuals/handbooks probably exceeds the literacy capacity of applicants, particularly those relating to heavy vehicle classes.
- Except in ACT, SA and WA, theory/knowledge testing is subject to auditing.
- Victoria is the only jurisdiction operating a hazard perception test (HPT). However, WA is considering the introduction of a version of the Victorian HPT and NSW has advertised a tender for the development of a HPT. Evaluation results of the Victorian HPT are encouraging, showing that it can discriminate between drivers likely to be involved in casualty crashes and those unlikely to be so involved on a predictive basis.

2.2.2 On-Road Practical tests

• All jurisdictions conduct on-road testing for car and heavy vehicle licence class applicants. Victoria conducts only off-road testing for motorcycle learner permit/licence applicants. Motorcycle applicant assessment is often combined with rider training programs. This is also the case for heavy vehicle categories, particularly the Multi-combination vehicle (MC) class, in jurisdictions such as NSW and Victoria

that have accredited private providers to conduct driver training and assessment associated with licensing.

- Most jurisdictions use an objective, competency based approach to on-road assessment. Tasmania still uses error-checking approaches. All jurisdictions use some form of standardised, printed road test score sheet. However, no two road tests or scoring systems are exactly the same. SA, Victoria and NSW use similar approaches based on credible US models (ie tests proven to be valid and reliable measures of competency).
- Standard test routes are used by most but not all jurisdictions. At most locations there are usually two to six test routes (range one to 16 across the jurisdictions). In only NSW, Queensland and Victoria are test routes kept confidential.
- Assessable items in road tests vary considerably across jurisdictions (from about 16 to 80) with test duration for car licence applicants varying from 20 to 55 minutes and 30-120 minutes for heavy vehicle classes. All jurisdictions employ immediate fail clauses for unsafe, dangerous or illegal behaviour exhibited during testing.
- The majority of on-road test content relates to vehicle control and safe driving practices with most incorporating some form of low speed manoeuvring. Some, such as Tasmania, also includes a roadworthiness check in test procedures.
- The pass mark in respect of on-road tests range from 80% to 95% across the jurisdictions. In most, but not all, jurisdictions applicants must pass all individual sections of the on-road test. First-time pass rates for theory knowledge test are estimated to be between 40% and 65% and 30% to 60% for on-road car tests. First-time pass rates for heavy vehicle on-road test applicants tend to be higher (70%-80%), perhaps due to stronger linkages between training and licensing programs.
- The oldest road tests are those conducted in Tasmania (1960s vintage) and the most recent in Queensland and WA (1998 and 1999 respectively). Most tests were developed in-house by testing staff or specialist test developers.
- Only tests in Victoria, NSW, SA (and to some extent NT) are based on evaluated models. However, no Australian jurisdiction has evaluated the validity, reliability or road safety effects of its on-road tests.
- On-road test fees varied from \$20 to \$68, with estimates of cost recovery ranging from 20% to 100% of actual cost.
- Most formal training in preparation for on-road tests is provided by commercial driving schools in the case of car licence applicants, with costs ranging from \$22-\$45 per hour across the jurisdictions. Training for heavy vehicle drivers is a mix of commercial driving school and specialist providers (some TAFE affiliated) such as DECA and SA Transport Training Centre and Transport Industry Skills Centre (ACT). In the case of motorcycles and heavy vehicle classes, training and assessment are often packaged together \$65-\$220 for motorcycle learner/licence programs and \$600-\$1200 for heavy vehicle packages. In most cases, training fees are set by market forces and are not regulated by road authorities. Commercial driver/rider training seemed concentrated in

main centres of population. Truck and bus driver training is sometimes funded or subsidised by government bodies as part of employment training schemes (eg in Northern Territory).

- Only ACT claims to have evaluated training aids, courses or programs in support of onroad tests, in 1998. However, no results or reports were provided to the consultant.
- Only ACT & WA noted that their on-road tests did not form part of a GLS.
- ACT and SA indicated that they operate competency-based training and assessment (CBTA) for car drivers while ACT, SA and NSW operate CBTA for heavy vehicle drivers. Only ACT and Tasmania claimed to operate CBTA for motorcyclists.
- All jurisdictions except SA and Tasmania claimed to have standardised manuals relating to the administration and scoring of on-road tests.
- Testing officers and testing systems were subject to auditing in all jurisdictions except Tasmania.

2.2.3 Off Road Practical Tests

- Most off-road practical testing relates to motorcycle learner permit and/or licence assessment. Only WA and Queensland conduct no off-road testing.
- Most off-road assessment related to motorcycle learner permit and/or licence applicants is linked to training programs provided by contractors on behalf of the licensing jurisdiction. With the exception of Tasmania, off-road tests for motorcyclists are about 10-20 minutes in duration. A Tasmanian probationary licence test is listed at 60 minutes.
- Given that private providers conduct most programs of motorcycle training/assessment, it is assumed that they operate on at least a cost recovery basis.
- Most off-road motorcycle assessment is based on variants of skills test adapted from US models developed by the Motorcycle Safety Foundation (MSF) USA in the 1970s and 1980s and/or from models developed via the Federal Office of Road Safety (FORS) in 1984. Victoria was the first to adopt this approach in 1983. Each jurisdiction requiring off-road rider assessment has revised its programs in the last six years.
- Some evaluation of motorcycle training and licensing programs has been conducted in Australia (eg in SA). Most evaluations have failed to find crash reduction effects for training/assessment programs. The major effect seems to be in deterring novice riders or potential riders from taking up road riding.

2.3 Comments on Driver Licence Testing and Assessment Arrangements across Australian Jurisdictions

There would appear to be little uniformity in driver licence testing and assessment and it would be fair to say that no two systems are the same. Tests vary in duration, complexity, scoring arrangements and cost across Australia. Revisions and changes to testing and assessment are not made on a national basis, but rather in response to jurisdictional dictates. This has resulted in jurisdictions being strung out along a continuum of development with some such as SA, Victoria and NSW often leading and the others following sometimes years later.

2.3.1 Some Commonality in Victorian, NSW and SA On-Road Tests

Despite the lack of uniformity, there are some threads of similarity which link approaches to assessment. The on-road car tests used in Victoria, NSW and SA are based on the Automobile Driver On-Road Performance Test (ADOPT), a competency based model developed in the USA. NT uses the SA drive test. As discussed in section 3.5, the ADOPT is quite a sound test in terms of validity and reliability, but has little predictive validity (ie it does not predict who will be involved in crashes).

2.3.2 Limited Adoption of Austroads Draft Novice Driver Competencies and the Rise of CBA and CBTA

There is also an indication that jurisdictions are influenced to some extent by the draft novice driver competencies developed by Austroads (see Austroads, 1995). However, these competencies have never been adopted nationally nor in their entirety. The consideration of minimum driver competencies may have generated interest in competency based assessment (CBA) and competency based training and assessment (CBTA) in SA and to some extent in NSW and ACT. Indeed, CBTA seems to have gained some popularity as the preferred or desirable approach to driver training and assessment. Part of this popularity may lie in the displacement of testing responsibilities from licensing authorities to private providers and reducing/eliminating the need for testing officers and consequently costs. For example, more than two thirds of car licence assessments in SA and ACT are conducted by private providers. This issue is discussed in greater detail in Section 3.8 *Competency Based Training and Assessment*.

As also noted in section 3.8, there is no published scientific evidence to suggest that CBTA is any better than more conventional methods whereby candidates undertake stand-alone competency or skills testing. Given that ACT has moved towards CBTA and other jurisdictions may follow suit, there is a danger of institutionalising another approach to driver licensing which is no better than stand-alone testing, particularly testing based on CBA principles. It is of note that CBTA is most popular in smaller jurisdictions such as SA and ACT with relatively compact centres of population (personal communication, Robin Anderson, Road Safety Manager, Urban Services ACT, May 1999). This may prevent larger jurisdictions or those with dispersed populations from adopting CBTA on feasibility grounds (eg there are few driving schools or other training contractors in remote areas).

There would seem to be some confusion about what constitutes competency-based assessment. In simple terms, CBA is where each competency to be assessed is specified in

measurable, behavioural terms with a candidates performance assessed as having met the competency or not met the competency (ie Yes or No). There are no shades of grey, a candidate either meets the competency or they don't. Some jurisdictions claim to use objective competency based assessment. However, the presence of assessment outcome categories of other that Yes or No (eg "improvement required") in supposed objective CBA systems suggests that the concept may be misunderstood, or at least misapplied in some quarters.

2.3.3 Lack of Evaluation in Driver Licensing Assessment and Issues of Validity, Reliability and Equity

Another common thread, though a more negative one, is the general lack of evaluation of tests/assessment tools or the training programs that support them in psychometric, educational or road safety terms. Exceptions to this relate to motorcycle training and assessment and the HPT (see section 3.6 Practical Off-Road Training and Testing: Motorcycle and 3.7 Hazard Perception Testing). Indeed, evaluation of the Victorian HPT suggests that it may represent a new direction in driver assessment, and one that may lead to crash reductions. The difficulties in evaluating driver training and assessment tools, particularly for smaller jurisdictions such as ACT, NT and Tasmania, are acknowledged. These issues are discussed in greater detail below.

First-time pass rates seem low across Australia suggesting that much "rework" is going on whereby candidates must return on at least one further occasion to gain a permit or licence. This suggests that the tests may be overly difficult, that outcomes are influenced by testing officer subjectivity, candidates are poorly prepared or a combination thereof. McKnight (1992), in discussing why first-time pass rates are often low, noted that failure is often not due to a lack of skill on the part of the applicant per se, but that the applicant does not know how to conform to test requirements. An initial test failure in effect "trains" applicants in what to expect and how to present themselves. McKnight (1992) supported this point by observing that experienced drivers from overseas sometimes fail local tests in Australia on first attempt, yet may have been driving in developed countries like USA, Canada and UK for many years without problem or incident.

Some on-road tests seem inordinately long, up to 120 minutes. While test reliability usually increases with test length, this must be set against the impact on the candidate and what is trying to be measured. It is likely that most longer tests, particularly those using outmoded error checking/point deduction approaches, merely provide a greater opportunity for candidates to fail. This may also reduce equity and test reliability. It should be borne in mind that an unreliable test can never be valid. From an administrative perspective, long tests are not efficient or desirable, as they limit the number of candidates that can be tested per day. They may also contribute to higher failure rates, increased rework (ie retesting of candidates) and increased cost to administrators and candidates. Most contemporary test research seeks to design tests that are as short as possible to reduce fatigue effects and improve efficiency. It would appear that some licensing jurisdictions may have unwittingly gone in the opposite direction, believing that a longer test is always a better test.

Just as there is variation in aspects of testing, there is variation in the provision of training materials such as handbooks, manuals or guides. Not all jurisdictions provide them for all

licence classes and the quality and content varies considerably. As noted in section 3.4 Knowledge Testing and Driver Licence Manuals, handbooks and the tests linked to them play a small but important part in the preparation of safe and responsible drivers. At one end of the spectrum, Victoria has put considerable effort into the provision of driver handbooks, video/audio tapes for licence applicants, while other jurisdictions produce one printed handbook to cover all licence categories or no handbook at all.

2.4 Concluding Comment on Driver Licensing Testing and Assessment Arrangements across Australian Jurisdictions

Overall, there would seem to be considerable scope for national uniformity and common approaches to the assessment, and perhaps preparation of drivers across Australia. However, the present system does work after a fashion, in that virtually all those who seek a particular licence class eventually achieve it, with few drivers being involved in subsequent crashes and with most experiencing reduced levels of risk with increasing age and experience (Christie, 1996). While this may be true, there is room for improvement in the efficiency and effectiveness of driver assessment in particular. This is important for, as noted below, testing and assessment standards set the agenda for the nature and extent of training that new drivers in any licence class will seek and the minimum levels of competency that they will attain on initial licensing.

The next section reviews the effectiveness of various assessment practices used by licensing jurisdictions and expands on some of the comments made above.

Page 11

3 REVIEW OF AVAILABLE STUDIES OF THE COMPARATIVE EFFECTIVENESS OF THE VARIOUS ASSESSMENT PRACTICES

3.1 Background

The consultant conducted a computerised literature review of the available (published) Australian and international literature on the comparative effectiveness of various driver testing/assessment practices.

Given that materials relating to driver licensing and assessment are not always accessible via the published literature, the consultants used professional contacts overseas in the USA, Canada, New Zealand and UK to source unpublished information.

The consultant also asked each licensing jurisdiction in Australia, and research bodies, both within Australia and overseas, about published and unpublished materials relating to the comparative effectiveness of various driver testing/assessment practices. Particular attention was paid to the crash risk reduction efficacy of various driver testing and assessment approaches. However, it should be noted that most driver licence tests, and associated training materials or courses, have not been subjected to crash-based assessment, or to psychometric/educational evaluation to establish their validity and reliability as assessment or training tools.

What follows below is a review of published reports on the effectiveness of driver testing and training components used in Australian jurisdictions. Few tests or training materials have been subjected to formal/empirical evaluations of their effectiveness. However, where a particular driver licensing assessment tool or training approach used in an Australian jurisdiction was based on or paralleled that used elsewhere for which some published evaluatory/effectiveness information was available, this was discussed.

To put driver licensing into perspective, a brief first principles discussion of the purpose of driver licensing, driver assessment and shortcomings of driver licence testing in terms of validity and reliability precedes this review.

3.2 The Purpose of Driver Licensing and Driver Assessment/Testing: Expectations and Limitations

Before considering the effectiveness of various driver licence assessment and testing practices, it is appropriate to consider the purposes of driver licensing and why the assessment and testing of drivers is required as a prerequisite to licence issue. This includes some consideration of expectations about what licensing can achieve and factors that tend to limit the validity and reliability of driver assessment and testing inherent to the driver licensing process.

3.2.1 The Purposes and Roles of Driver Licensing

The main purposes of licensing set out in the legislation of states such as NSW, Queensland and Victoria may be summarised as follows:

(a) to ensure that people who drive motor vehicles on highways are competent drivers; and

- (b) to ensure that drivers are aware of safe driving practices and road law; and
- (c) to ensure that people who are, or who become, unsuited to drive are not permitted to drive on highways; and
- (d) to enable the identification of drivers for the purposes of law enforcement and accident investigation

The statements of purpose for driver licensing contained in the legislation of each Australian jurisdiction suggests a relatively common view of why drivers are licensed and why driver licensing assessment is necessary (eg see Staysafe, 1997; Travelsafe, 1996; Road Safety Act 1986 (Victoria)).

Driver assessment and licence testing relates primarily to the first two purposes of licensing identified in the Victorian legislation. Watson, Fresta, Whan, McDonald, Dray, Beuermann & Churchward (1996) and McKnight (1992) seem to concur with this view. They add that the specification of minimum competencies and the imposition of assessment to test for an applicant's possession of the requisite skills/competencies influences the motivation of candidates to achieve minimum competency levels and the provision of instruction services to assist them in achieving these competency standards. Watson et al (1996) wrote that:

...driver testing can perform three important roles:

- to assess whether drivers meet minimum sufficient standards to become licensed;
- to act as an incentive to novice drivers to practice/study for practical and knowledge tests, at an important stage in the driving career; and
- to influence the nature of pre-licence driver training offered to novice drivers, particularly by the commercial instruction industry. (p98)

An appreciation of these roles is important for putting driver licence testing into context. Driver licensing standards largely determine what licence applicants will learn and what training and educational materials are provided. Licensing standards must drive training standards, not the other way round. Training in itself has little value unless it addresses the development of competencies that must be achieved for licence qualification. There is little motivation or incentive for licence candidates to learn more than that required to gain a licence, permit or other certificate.

3.2.2 Influences, Expectations and Limitations of Driver Licensing Assessment

Researchers such as Macdonald (1987) have noted that raising the competency standards for licensing also increases the amount of training and experience that a candidate will seek (and perhaps require). Thus, driver licence testing is a potentially powerful motivational tool with the capacity to influence the entry-level skills of new drivers within all licence classes. However, this potential is tempered by the social and economic reality that most Australian adults need to gain access to licensed driving (and most do) for the community to function effectively and efficiently. For this reason it would be unacceptable to set the initial licensing standards at an unreasonably high level across the various licence classes. From an educational measurement and behavioural perspective, there is also a limit to the competency levels that one could realistically expect novices to achieve at initial licensing. Maturational factors also play a part in limiting what reasonably may be expected of novice drivers across all licence classes (Lonero, Clinton, Brock, Wilde, Laurie & Black, 1995; Lynam & Twisk, 1995; Mayhew & Simpson, 1995). Licensing requirements, therefore, tend to be a mix of what is desirable in competency and safety terms, what is achievable in respect of educational and human developmental capacity, tempered by the reality of what the community and government will accept as reasonable. They also tend to be a manageable and measurable sub-set of the full range of driver capability criteria that could be specified.

It is acknowledged by Watson et al (1996) and others such as Macdonald (1987) that, while the community and government often put great stock in driver licence tests and assessment, the ability of tests to accurately discriminate between applicants who will be unsafe (ie have crashes) and those who will be safe (ie not have crashes) is limited. In most cases, licence testing addresses only road law knowledge and basic vehicle handling skills and have that capacity to screen out only the grossly incompetent (Lynam and Twisk, 1995). In short, licence tests tend to be high on face validity but have little predictive validity, which limits their value as road safety measures (Macdonald, 1987; McKnight, 1992). High levels of subjectivity in many on-road tests, combined with the lack of effective auditing, have also limited their reliability and equity as assessment instruments. However, testing and auditing systems developed in more recent years have sought to eliminate these problems (Christie et al, 1998; Hagge, 1994; McKnight & Stewart, 1990).

In most cases, licence tests assess only the obvious, accessible competencies – those that have high face validity. For example, while the Austroads project to identify and specify novice driver competencies (Austroads, 1995) identified five broad competency groupings:

- knowledge;
- psychomotor skills (eg vehicle handling skills);
- perception;
- cognition; and
- attitude/motivation;

conventional driver assessment addresses only the first two. This is despite the evidence from research into driver behaviour that the latter three competency groupings are likely to have the greatest influence on the crash risk of a novice driver post initial licensing (Lonero et al, 1995; Watson et al, 1996). As noted below, this is changing to some extent with the introduction into some jurisdictions of hazard perception tests, which tap perceptual and cognitive aspects of the driving task.

3.3 Comparative Effectiveness of Various Driver Testing/Assessment Practices

As noted above, there have been few comparative evaluations of driver licence test/assessment components used in Australia. However, some evaluations of testing/assessment approaches (some combined with training programs) have been undertaken either in-house or by external researchers. The nature and results of these are summarised below. These are addressed by type of test (ie knowledge/theory, practical – on road, practical - off road and hazard perception). CBTA is addressed as a separate type of approach as it involves integrated elements of both training and assessment. Education

and training resources or courses are discussed in association with these assessment measures rather than in isolation. It is clear from the literature that a major consequence of setting a licence test is to provide an incentive for education, training and the development of driving competencies (Macdonald, 1987; McKnight, 1992; Watson et al, 1996).

While the type of driver licence to which a particular approach to assessment was applied was noted (ie car, motorcycle and heavy vehicle), this was deemed to be of lesser importance. The central issue is the approach to assessment and its validity and/or reliability, rather than the specific vehicle type or licence class to which it was applied.

3.4 Knowledge Testing and Driver Licence Manuals

All Australian driver licensing use some form of knowledge testing at learner permit and licence level for all classes of licence. However, the form that this takes varies, as does the nature of test development and the degree to which tests have been evaluated in educational an/or road safety terms. In Victoria and NSW (and to a limited degree, in Tasmania) knowledge tests are computer presented (multiple choice format) while other jurisdictions use written, multiple choice versions. Oral testing is still used in some cases.

While knowledge tests for heavy vehicle drivers cover more technical information relating to the safe and legal operation of trucks and buses (eg loading, hours of operation etc), the test format is similar to that employed for car and motorcycle licences.

3.4.1 Rationale for and Evaluation of Theory/Knowledge Tests and Related Handbooks for Drivers Licence Applicants

There have been few evaluations of knowledge (theory) tests or the driver manuals/handbooks provided to communicate examinable information to licence applicants. The rationale behind knowledge tests seems to be to ensure that novice drivers are aware of basic road laws and practices before taking to the road on the assumption that this will promote safe operation and efficient road use (Lonero, 1998; Watson et al, 1996). Such tests have high face validity and conform with community expectations of the need to know something of road law before taking to the road as a driver.

Given that road law information is not readily available or accessible to licence applicants, each jurisdiction has developed some form of a manual or handbook containing information on road law, basic driver licensing procedures/requirements and, sometimes, other topics such as safe driving practices and road safety in general. In some cases, one handbook serves for all classes of licence within a jurisdiction, while in others, separate handbooks are produced for car drivers, motorcyclists and heavy vehicle drivers (eg NSW and Victoria). Additional training aids such as videos and audiotapes are provided in some jurisdictions and web sites are also provided in ACT and Victoria.

The purpose of these handbooks appears to be assist licence applicants in learning the material to be examined at permit/licence testing, and subsequently applied as solo drivers. To this end, some manuals such as the *Victorian Traffic Handbook* contain practice questions at the end of each chapter in a form similar to that which will be encountered on the knowledge tests. The existence of knowledge tests for licence applicants acts as an incentive for candidates to learn road rules and safe driving information (Mayhew &

Simpson, 1990; Watson et al, 1996). A more ambitious view is that such handbooks or manuals will become reference texts to which licensed drivers can refer to refresh their knowledge over time.

3.4.2 Evolution and Limitations of Driver/Rider Handbooks

The Victorian Traffic Handbook and Victorian Rider were perhaps the first "new generation" publications that moved away from a formal listing of rules and/or a series of stock questions and answers. These publications were based on model driver licence manuals developed by Dr Jim McKnight for the US Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) in the 1970s (McKnight & Green, 1976). Piloting of the NHTSA model handbooks in the state of Virginia by McKnight showed some significant, but small safety benefits (reduced crashes among 16,000 drivers who had read the manual and taken the knowledge test linked to it) resulted from these improved handbooks (McKnight & Green, 1976; Lonero, 1998). From an administrative and economic perspective they also improved applicant pass rates as the pool of requisite road law and driving **knowledge** was clearly outlined in a manner that even those with only a basic level of functional literacy could understand.

Most handbooks attempt to keep the text simple and at a reading age of about 10 years (roughly equivalent to being able to read and understand a daily tabloid newspaper). However, in respect of heavy vehicle materials, the reading age required to understand the content is often high, sometimes up to university undergraduate level in the case of Victorian and NSW manuals and the Federal Office of Road Safety (FORS)/NRTC loading guide (FORS/NRTC, 1994). Knowledge test questions for heavy vehicle licence applicants are therefore often more complex. This may create something of an access and equity issue as recent literacy surveys have found high levels of functional illiteracy among transport sector workers and the adult population at large (ABS, 1997). For example, the ABS national adult literacy study conducted in 1996 found about 45% of those surveyed from the transport and storage industry sector to have basic reading, writing and mathematical abilities below that required to cope with everyday written material at work (ABS, 1997). Half to two thirds of this group performed at the lowest assessed levels and were expected to experience considerable difficulties with using printed materials encountered in the course of everyday life.

3.4.3 The Apparent Road Safety Value of Traffic Law Knowledge

Despite bringing about improvements in psychometric rigour and reliability and fairness to licence applicants, evaluation of Victorian knowledge or theory tests found little correlation between written test performance and driving performance (Torpey, 1988). This is similar to findings reported by Mayhew & Simpson (1990) for the USA and Canada, where only low positive correlations were found between test scores and crash or driver conviction rates. Perhaps this is not surprising as studies have shown that lack of road knowledge per se does not appear to increase the crash risk of drivers. Older, more experienced drivers often have degraded knowledge of the road laws in force at any given time, yet have a low level of crash risk (Christie, 1996). Rule-following, based on road law knowledge, appears to give way to a broader and more effective driving behaviour with the accumulation of solo driving experience (Macdonald, 1994). Macdonald notes:

Inexperienced drivers show less awareness than older drivers of the actual realities of road system operation in which other road users cannot always be relied upon to follow road laws. Their over-reliance on formal rules or laws appears to reflect the poorer development of their cognitive schemata, on which are based their perceptions and expectations. (p39)

One could argue that the emphasis on road law and its assessment at initial licensing may add to the problems experienced by young and/or novice drivers. However, it would be unreasonable to suggest that road law knowledge should not be a pre-requisite for learner permit or licence issue. Overall, it would seem that, while necessary for initial novice driver licensing, the importance of road law knowledge of the type tested at initial licensing diminishes with a driver's experience as improved perceptual and cognitive skills develop.

In the case of truck and bus driver knowledge tests, these are less concerned with basic road law per se, and more focused upon heavy vehicle specific issues related to safe and legal operation.

A recent study by Maag, Laberge-Nadeau, Dionne, Desjardins & Messier (1999) found that licensees who passed the Quebec (Canada) theory test for car drivers on the first attempt (about 79% of applicants) had significantly lower levels of crash involvement in the first year of solo driving. This result was an unexpected by-product of a population level³ comparison of novice drivers required to undertake compulsory theory training prior to knowledge testing, and those who took the test without the compulsory training requirement. There was no statistically significant difference between the two groups in terms of crash involvement in the first year of solo driving. Maag et al (1999) concluded that the higher crash involvement of those who did not pass the theory test first time should be further investigated.

One could speculate that the theory test may be acting as a screening device in respect of individual attributes and abilities beyond road law and safe driving knowledge. However, the results also suggest that simply re-training those who fail to pass on test content on the first attempt may not reduce their crash risk as solo drivers.

3.4.4 Concluding Comment on Knowledge Tests and Related Handbooks

In conclusion, there would appear to be little evaluatory evidence that knowledge tests lead to reduced crash risk among novice drivers. However, the learning of basic road law and safe driving information provides a central plank on which further learning and experience as a solo driver is built after initial licensing.

There may be some small economic, administrative and safety benefits to be gained in adopting a uniform approach to the production of licence manuals and associated knowledge theory tests. Lonero (1998) made this point in a memorandum to the driver licensing authority in the Canadian province of Yukon in Canada. Lonero noted that there was little merit in each province/territory adopting its own approach to manual production and testing and that "best practice" could not be achieved by each jurisdiction going its

³ - ie all 16 year old drivers in Quebec 1989-93 – about 750,000

own way. He therefore recommended a uniform approach across all Canadian driver licensing jurisdictions. It is suggested that these comments would apply equally to Australia as to Canada.

There is also some evidence from Quebec that first-time success on knowledge tests is predictive of lower crash risk, however, this finding may need to be confirmed via similar evaluations in Australian driver licensing jurisdictions.

3.5 Practical On-Road Testing and Training

As in most motorised countries, all Australian driver licensing authorities require licence applicants to undergo a practical, on-road test of driving skill in a vehicle representative of the class of licence applied for. These tests tend to concentrate on psychomotor skills relating to vehicle handling and rarely go beyond vehicle control and the practical application of road law knowledge (Watson et al, 1996). For this reason, they tend to screen out only the totally incompetent. As McKnight (1992) puts it:

Briefly stated, the purpose of a road test is to assess an applicant's possession of the skills required to operate an automobile in a manner that is consistent with both the safety and mobility of the motoring public. It should pass those applicants who have the skill needed to operate without posing a clear and present danger to the safety and mobility of others and fail only those who cannot. (p9)

McKnight (1992) goes on to note that the content, duration and format of the training provided to novice drivers across all licence classes is largely driven by the nature of the on-road test required within a jurisdiction. Macdonald (1987) and Watson et al (1996), who also observe that the way to improve training standards is to raise the skill/competency requirements of the road test, echo this. They note that applicants are highly motivated to achieve whatever requirements are set down for licence issue. However, they also note that novice drivers have little motivation to go beyond the minimum levels specified and will not engage in training programs that exceed licensing standards. For this reason, recommendations to improve and increase driver training in isolation from driver licensing standards, such as those contained in Travelsafe (1996) make little sense.

Given that industry skills over and above those required to obtain a truck or bus licence are necessary to secure employment as a transport drivers, heavy vehicle licence applicants may be motivated to go beyond the competency and skills required for licence issue. However, the same motivational forces are at work in that the skills and competencies required by employers motivate aspirant truck/bus drivers to undertake training and development to reach the required competency levels. For this reason, novice heavy vehicle licence holders will join programs such as *Driversafe*, a joint venture between Transport Training Centre (SA), and the South Australian Road Transport Association, which provides industry skills training to levels acceptable to employers in SA combined with employment placement. They will also seek out similar industry-oriented programs conducted by providers such as DECA (Victoria) and Transport Industry Skills Centre (ACT) as they cover competencies that transport operators expect transport drivers to possess.

3.5.1 Development and Evaluation of On-Road Driver Licence Tests

Despite the long history of in-vehicle, on-road testing, both Macdonald (1987) and Watson et al (1996) note that few tests have been evaluated in psychometric, behavioural or crash reduction terms. This is due partially to:

- difficulties in relating behaviour under test conditions to driving behaviour under normal conditions;
- the lack of agreement on what constitutes safe driving beyond the avoidance of crashes; and
- the fact that driving behaviour is determined by motivational factors as much as by driving ability (Macdonald, 19987; Watson et al, 1996; McKnight, 1992).

Evaluations are also often confounded by age and experience effects as novice drivers (or riders) improve with age and experience regardless of the nature of the practical on-road test applied at initial licensing. For this reason, the predictive validity of on-road testing is difficult to assess (Macdonald, 1987; Mayhew & Simpson, 1996). Indeed, an evaluator is, in a sense, shooting at a moving target as drivers are not the same in test and non-test situations and continue to change over time with experience.

Notwithstanding the above, it is of note that the on-road tests used in NSW, Victoria and SA (and some of those used in NT) are based on US models that have been scientifically evaluated and found to be valid and reliable measures of drivers behaviour. The Programmed Observation Licence Assessment (POLA) used by VicRoads, the Vehicle on-road test (VORT) used in SA (and NT), and the Driver Assessment Road Test (DART) are based on the Automobile Driver On-Road Performance Test (ADOPT) developed by McPherson & McKnight (1981) for NHTSA. The ADOPT was developed as a model for US jurisdictions to replace older, less valid and reliable tests. Victoria was the first Australian jurisdiction to take up the ADOPT model, followed by NSW and SA (and NT).

Macdonald (1987) wrote of the ADOPT that:

The ADOPT is unique among licence tests in that its validity was evaluated both in terms of the capacity of individual behavioural measures to discriminate drivers belonging to criterion groups (experienced and novice drivers) and in terms of the correlation between test behaviour and behaviour under "real world" driving conditions where drivers were unaware of being observed (they were filmed by an observer in a following vehicle when they left the testing station). (p73-74)

The ADOPT is arguably the most valid and reliable on-road car test developed, perhaps with the exception of the Californian Driver Performance Evaluation (DPE), which will be briefly discussed below. Its strengths lie in:

- the standardisation of test routes used in driver assessment;
- an objective, competency based approach to scoring;
- reduction of the opportunity for subjective input from licence testing officers; and
- sampling of driving competencies shown through task analysis to be related to safe driving behaviour (Macdonald, 1987; McPherson & McKnight, 1981).

It is also a relatively short test (duration 10-15 minutes), as efficiency and effectiveness are desirable operational attributes. These factors, together with a detailed test manual and training guidelines for testing officers, set it apart from other on-road tests.

A heavy vehicle version of the ADOPT was also developed for NHTSA (McKnight, Kelsey & Edwards, 1984; McPherson, McKnight & Oates, 1984). This test known as the TORQUE (Transport Operators Qualification Examination) was adopted by Victoria as a replacement for its truck and bus licence tests. NSW and SA subsequently developed variants of the TORQUE and incorporated them into their heavy vehicle CBA and CBTA systems for heavy vehicle driver licensing.

It is of interest that Tasmania and NT (in part) appear to use older style tests largely based on the California Department of Motor Vehicle (DMV) test – a variant of that developed by McGlade (1963). This style of test has been shown to be of limited validity and poor reliability, as scoring is open ended, based on error detection, and vulnerable to subjective input from the testing officer. While the Californian DMV modified its tests in the late 1970s following identification of its shortcomings (Dreyer, 1976; Ratz, 1978), versions of these tests continued to be used elsewhere. Similar evaluations in Victoria resulted in the on-road car test being replaced by new versions based on the ADOPT (see Fabre, Christie & Frank, 1988) and heavy vehicle tests being replaced by new versions of the TORQUE.

WA adopted a new on-road test for car drivers in 1999. This test is of as yet unknown validity and reliability – the WA licensing authority intends to evaluate the test. Similarly, Queensland adopted a new on-road test in 1998 (titled Q-Safe). Though apparently popular with the public, the validity, reliability, and crash reduction value of this test (used for all licence classes) is yet to be established through evaluation.

3.5.2 Recent Development and Evaluation of On-Road Tests: The Californian Driver Performance Evaluation

Since development of the ADOPT and TORQUE, McKnight & Stewart (1990) developed a competency based driver testing model for the California DMV. This test, known as the Driver Performance Evaluation (DPE), was based on a model competency based-test developed for drivers of commercial vehicles by McKnight for the American Association of Motor Vehicle Administrators (AAMVA) (personal communication, Dr Jim McKnight, 20 April 1999). The DPE has been trialled by DMV and found to be valid, reliable and superior to other road tests used in California (see Hagge, 1994). In validity and reliability terms, the DPE is similar to the ADOPT⁴, although the DPE is a longer test – lengthening a test generally increases reliability. The DPE also discriminated well between novice and experienced drivers with accident-involved drivers achieving poorer test scores than non accident-involved (this latter difference was not statistically significant, however).

Other features of the DPE are that it is longer than most other road tests (about 25 minutes compared to 10-15 for the ADOPT) and includes a freeway driving component which was shown to contribute significantly to test validity. However, DMV researchers note that there is pressure to remove the freeway component as it may not be feasible to administer

⁴ - eg net reliability of .78 and .76, respectively (personal communication, Scott Masten, Research Program Specialist, DMV, California, 24 May 1999)

statewide, particularly in more remote areas. Its removal would also shorten the test to about 20 minutes, which would be an administrative advantage (personal communication, Scott Masten, DMV, California, 24 May 1999).

DPE has been introduced into about one third of California, mainly southern California, and funding has been provided to implement the test statewide during 1999 (personal communication, Scott Masten, DMV, California, 24 May 1999). While several Australian jurisdictions use variants of the ADOPT and TORQUE, none uses a version of the DPE.

3.5.3 Development and Operation of Motorcycle Rider Tests

As noted below, there is little evidence of improved competencies and reduced crash risk in respect of Motorcycle Safety Foundation (MSF) developed off-road motorcycle skill testing, eg Motorcycle Operator Skill Test (MOST), Alternate MOST, and Motorcycle Licence Skill Test (MLST). However, these tests are generally valid and reliable in measurement and operational terms.

MSF also developed a credible on-road test, the Motorcycle in Traffic Test (MITT), to complement its off-road tests or act as an alternative to the MOST/MLST in US jurisdictions where these off-road tests were not taken up. It is estimated that only about 40% of US jurisdictions adopted a variant of the MITT. However, no published reports have been identified regarding formal evaluation of the MITT in psychometric or crash reduction terms.

Victoria was the only Australian jurisdiction to introduce the MITT (in 1985). However, on-road testing via the MITT was ultimately abandoned, as research showed the results of the off-road MOST/MLST correlated highly with on-road performance at levels above 90%. The motorcycle road test (MITT) was therefore withdrawn in 1993 to avoid redundancy and reduce costs (Newland, 1999). Victorian motorcycle licence applicants are currently subject to only an off-road skills test.

On-road testing for motorcyclists in SA, WA and Queensland appears to be based on error checking approaches. As noted elsewhere, this style of test was found to be unreliable and liable to subjective bias which resulted in its replacement in Victoria (see Fabre et al, 1988) and modification in California (Ratz, 1978; Shumaker, 1994).

In the case of NSW, Tasmania and Northern Territory, on-road assessment of motorcyclists has been incorporated into rider training courses for novice motorcyclists conducted by or for each licensing jurisdiction (Newland, 1999). No published evaluations of these assessment procedures have been located.

3.5.4 Concluding Comment Regarding On-Road Tests

In conclusion, few on-road tests in use in Australia or overseas have been subjected to empirical evaluation either during their development or following introduction. However, NSW, SA, (NT in part) and Victoria employ on-road tests which are based on psychometrically developed and evaluated models (ie the ADOPT and TORQUE). These tests could be considered to approximate best practice. Other Australian licensing jurisdictions appear to use on-road tests based on superseded California DMV models dating from the 1960 and 1970s. While it should be noted that WA and Queensland have introduced new on-road tests, these new tests have not yet been evaluated.

3.6 Practical Off-Road Training and Testing: Motorcycle

Several Australian licensing jurisdictions have introduced integrated, competency-based training (or at least skills-based training) and licensing programs for novice motorcyclists which involve training and assessment conducted on off-road ranges (ACT, NSW, Victoria, South Australia and Tasmania). For this reason, training and assessment issues will be considered together in the section that follows.

Typically, these novice rider training/assessment programs, which range from 4 to 16 hours in duration, combine practical and classroom instruction on riding skills and safe riding behaviour. A feature of novice motorcycle training in ACT, NSW, NT, Victoria, SA and Tasmania has been the integration of licence testing procedures into the training programs. This allows successful candidates to gain learner permits or probationary/provisional licences without recourse to separate testing by the respective licensing authority (Watson et al 1996). In ACT, NSW, NT, Tasmania and Victoria, provision of rider training/assessment has been devolved to private contractors who operate an approved, standardised program across each jurisdiction. This is perceived to be an economic and administrative advantage for licensing jurisdictions (Watson et al, 1996). Training programs are compulsory in Tasmania, SA and NSW. The ACT program, while compulsory, is subsidised by government. However, rider training is not compulsory in Victoria.

3.6.1 Origins of Off-Road Motorcycle Training and Testing

These training and assessment programs are primarily based on credible models developed in the USA in the 1970s and 1980s by researchers such as Ken McPherson and Jim McKnight (see McPherson, 1989) and the Motorcycle Safety Foundation (MSF) of the USA (Rothe & Cooper, 1987). Hurt, Ouellet & Thom (1981) identified braking, obstacle avoidance and curve riding as three fundamental skill groups for novice riders. Aspects of these have been incorporated into assessment tools such as the Motorcycle Operator Skill Test (MOST), the Alternate MOST (a lower cost alternative to the full MOST) and Motorcycle Licence Skill Test (MLST) developed by the MSF. Training courses focusing on these skills were also developed by MSF and adapted for use in jurisdictions such as California. In Australia, Prem & Good (1984), in a study for FORS, confirmed the importance of braking, curve riding and obstacle avoidance to crash risk reduction among novice motorcyclists.

MSF-style, competency based training was first introduced into Victoria in the early 1980s and was subsequently taken up by NSW and SA. There have also been moves since the early 1990s towards adoption of national core syllabus for motorcycle training (Henderson, 1991). However, no nationally agreed syllabus or assessment approach has been adopted to date and compliance with a notional core curriculum is variable (Newland, 1999; personal communication, Ray Newland, Manager, Motorcycle Affairs, Federal Chamber of Automotive Industries (FCAI), 20 April 1999).

3.6.2 Evaluation of Off-Road Rider Training and Testing

It is unfortunate that few of the training and/or licensing programs for novice riders have been evaluated. Watson et al (1996) noted:

Despite the popularity of rider training in many countries, very few programs have been subjected to rigorous evaluation. As with rider training, many of the evaluations that have been conducted do not consider the effectiveness of these training courses in terms of crash, injury, or fatality rates and have limited validity due to serious methodological limitations and poor statistical analyses. (p54)

The integration of training and assessment into novice rider programs in jurisdictions such as Victoria and SA has made it difficult to partial out the effects of training and other factors, such as the role of assessment, or the discouragement of some potential riders from taking up motorcycling (Henderson, 1991; Kloeden, Moore & McLean, 1994).

Watson et al (1996) note that while motorcycle testing has moved perhaps furthest and fastest towards competency based approaches that better reflect the real world, there is still a lack of empirical evidence that tests such as the MOST and the MLST are valid and reliable crash reduction tools. However, the competency-based content and structure of these tests are superior to most others and are firmly based on the outcomes of studies of what and how riding skills should be addressed (Prem & Good, 1984; Batchler, 1988).

Despite their respectable pedigree, there is a lack of empirical evidence to show that the type of key skills-based, integrated training and assessment programs for novice riders used in NSW, Tasmania, Victoria or SA reduce the crash involvement of participants. Kloeden et al (1994) reviewed some 20 published studies of the effects of motorcycle training in North America, Australia and the UK, and also evaluated the effects of the Department of Transport (SA) Ridersafe program for SA novice riders (a MSF style competency based program of training and integrated assessment). Kloeden et al concluded the following:

This analysis of the data available on the introduction of Ridersafe in South Australia cannot show any effect of Ridersafe on safety, positive or negative. (p23)

Kloeden et al (1994) also noted the methodological problems involved in trying to evaluate the crash reduction effects of motorcycle training and licensing initiatives. Major difficulties arise from the small number of riders licensed each year, the small number of actual crashes per annum and the long time periods required to accumulate sufficient data to analyse crash effects. They suggest that these problems may make it impossible to ever evaluate adequately and confidently the effects of programs such as Ridersafe.

While clear evidence of crash reduction effects could not be demonstrated, Kloeden et al (1994) did see some benefit in the Ridersafe program in terms of consistency of application and the need for minimum competencies to be met before licensing. In this sense Ridersafe performs one of the basic functions of driver licensing, in that it prevents those who are grossly incompetent from entering the road system as drivers or riders. Given that the crash risk of novice riders is up to 20 times higher than that for novice drivers, the need to keep incompetent riders off the road is particularly important (Road Safety Committee, 1993).

3.6.3 Concluding Comment on Off-Road Rider Training and Assessment

In conclusion, the training and assessment approaches used in SA, NSW, Victoria and Tasmania are soundly based on research and follow competency-based principles that have merit in educational measurement terms. However, these initiatives have not been clearly shown to have road safety benefits for novice motorcyclists beyond simple deterrence of some of those who attempt training or assessment. Furthermore, the relatively low number of people taking up licensed riding each year (less than 10% of overall new licences) may prevent a definitive evaluation from ever being conducted.

Adoption of a uniform, national approach to novice rider training and licensing would increase the size of the consistently trained/assessed rider pool, and would correspondingly increase the likelihood of being able to assess the road safety effectiveness of competency based rider training/assessment.

3.7 Hazard Perception Testing

In her authoritative review of driver assessment and performance measures, Macdonald (1987) identified that, while most novice drivers quickly master the psychomotor skills of driving, they remain poor at perceiving and interpreting moving and stationary hazards that may be the antecedents to crashes for some years. This led to Macdonald suggesting that improvements in novice driver assessment may lie in developing psychologically based techniques that assess to what extent novice drivers could detect and respond appropriately to driving hazards. As few crashes result from deficits in psychomotor skills per se (eg car control skills), rather from attentional, perceptual and information processing errors, this seemed an appropriate conclusion. Macdonald went on to strengthen these views in her 1994 research report for FORS on young driver performance characteristics and capacities (Macdonald, 1994).

Macdonald's conclusions were echoed by Milech, Glencross & Hartley (1989) in their study of skill acquisition in young drivers, produced as part of FORS research into young drivers. McKnight (1992) also considered that more may be gained from investing in the development of hazard perception assessment tools rather than in the refinement of in-car tests as a means of identifying novice drivers at higher risk of crash involvement.

3.7.1 Development and Evaluation of Hazard Perception Testing in Victoria

With the advent of more advanced computerised assessment techniques in the late 1980s, VicRoads' psychologists Ron Christie and John Fabre, together with sociologist, Mike Hull, developed and trialled a screen-based hazard perception test (HPT) for use in Victoria. This test presented driver's eye views of various traffic scenes (eg changing lanes on a freeway, waiting at a stop sign for a safe gap in traffic when making a right-hand turn at an intersection). Candidates were asked simply to touch the screeen when they would attempt the behaviour in question or abstain from touching the screeen if the driving action could not be completed safely (eg gaps in traffic were too small). The test was trialled extensively in the early 1990s and was found to successfully discriminate retrospectively between novice and experienced drivers and between drivers who had been involved in crashes and those who had not (see Hull & Christie, 1992).

Following trialling at several sites in Victoria, HPT was introduced statewide into Victoria and is still the only jurisdiction in Australia or elsewhere to have a fully operational hazard perception test. The original intention was to use the test at the end of the graduated licensing period (three years in Victoria) as an "exit test" whereby those who performed satisfactorily would be granted full licence status while those failing to meet the required standards would remain at the probationary level. However, political and economic concerns about the retesting of already licensed drivers resulted in the HPT being incorporated into the probationary licence testing regime.

In general, research favours the use of a HPT as an "exit" rather than an entry-level test in a graduated scheme. As concluded by Catchpole, Cairney & Macdonald (1994) in a recent in-depth study of young drivers in Australia:

... hazard perception testing may be more appropriate at a later stage in a graduated licensing scheme rather than at the time of initial licensing. In view of the limitations on the attentional capacity of the youngest drivers, it appears that the maximum benefit may be obtained by introducing a hazard perception test to control graduation from a probationary/provisional licence to an unrestricted licence, rather than using the test as a requirement for candidates for the initial solo licence. (p 73)

A major crash-based, prospective study for VicRoads of the effects of the HPT has just been concluded by the Australian Council for Educational Research (ACER) with favourable results. In a letter to the author dated 5 May 1999, Ms Susan Allen, General Manger, Registration & Licensing, VicRoads wrote that:

While the [ACER] report is yet to be formally released, findings indicate a significant correlation between HPT scores and subsequent crash involvement, where people with low HPT scores were more likely to be involved in fatal/serious injury crashes than people with higher HPT scores.

This suggests that, unlike most other driver performance measures or licence tests, the HPT was able to predict those novice drivers likely to be involved in casualty crashes. Once the results of the ACER study are officially released, most likely by September 1999, it should be possible to quantify the crash reduction impact of HPT on young drivers in Victoria and, perhaps, elsewhere.

In the interim, it is estimated that development of a touch-screen-based HPT from scratch would cost a jurisdiction between \$500,000 and \$1,000,000. This is based on the consultant's experience in developing HPT components in Victoria and elsewhere. Roll-out costs would be additional and proportional to the size of a jurisdiction. Costs could perhaps be reduced through the licensed use of an existing test such as that produced and patented by VicRoads. While benefits cannot be accurately estimated at present, the "breakeven cost" for the introduction of HPT is likely to equate to about one fatal crash or about seven serious injury crashes⁵. Using tables of crash involvement in published reports as a guide, this would also equate to a less than one percent reduction in fatal or serious

⁵ - using a community cost of \$850,000 for a fatality and \$130,000 for a serious injury crash (personal communication, Kathy Diamantopoulou, MUARC, 27 July 1999)

injury crashes for one year among novice drivers aged under 25 years in Queensland, NSW and/or Victoria (Diamantopoulou, Skalova, Dyte & Cameron, 1996; Staysafe, 1997;Watson et al, 1996).

3.7.2 Concluding Comments on Hazard Perception

In conclusion, therefore, HPT appears to be a driver assessment technique which has the potential to reduce novice driver crashes through the early identification of drivers with poorer levels of the perceptual and cognitive skills required to detect and respond appropriately to driving hazards that may lead to crashes. For this reason, WA Transport is negotiating the adaptation of the Victorian HPT for use in WA and RTA (NSW) has advertised a tender for the development of a HPT to suit NSW conditions. Overseas, authorities in British Columbia and the UK are also developing hazard perception tests for use in the assessment and licensing of novice drivers (see Howard-Rose, 1999 and Sexton, 1999, respectively). However, there may be greater benefit in using HPT as an "exit" rather than entry level test for novice drivers within graduated licensing systems.

3.8 Competency Based Training and Assessment (CBTA)

The (then) Department of Transport, South Australia introduced a competency based training and assessment system in 1993. The system, often known colloquially, as the "log book" program enables novice car drivers to obtain a licence through completion of a competency-based training course where progress and assessment are recorded in a standardised log book issued to the learner driver. The competencies and their sequencing are specified by the licensing authority, which maintains policy and administrative control of the system.

Once all competencies have been achieved by a novice driver and duly recorded, the completed log book is presented to the licensing authority and a driver licence issued on the strength of this, without further assessment. As an alternative, learners may also undertake a competency based test without having completed the log-book system, which is a competency based test known as the Vehicle on Road Test (VORT), based on the ADOPT. However, licence testing is now set at full cost-recovery levels to encourage novices to opt for the log book system as opposed to stand-alone testing.

Driver training and assessment under the "log book" system is provided by accredited private sector driving instructors/assessors. Transport SA does little actual licence testing since the advent of CBTA. Novice drivers may go to any accredited training/assessment provider and may change trainers if they choose to.

Watson et al (1996) noted that the SA "log book" system was attractive to licensing authorities, as it combined training and testing within a competency based system, and reduced or eliminated the need for the jurisdiction to employ licence testing officers to conduct driver licence tests. Indeed, Watson et al (1996) note that it would appear that the move to CBTA in SA had both economic, safety and educational objectives. Similarly, McKnight (1992) observed that the SA CBTA system promised economic advantages for the licensing authority, but went on to note that access and convenience for licence applicants was also likely to improve.

3.8.1 Evaluation of CBTA in SA

Roach, Taylor & Dawson (1997) compared the accident rate of SA drivers who had obtained their licence via the log book system with those who obtained it via the standalone test (the VORT). Results of the study (n=267) showed no statistically significant difference in crash rate between the two groups of novice drivers. There were also no significant differences in respect of driving offence rate, self-rating of driving skill or anxiety when driving. The researchers concluded that:

These findings indicate that young drivers who complete the two licence methods in SA behave similarly on the road and have similar perceptions of driving attitudes and behaviour (p3)

However, self-report data⁶ suggested that novices who felt more confidence in their driving skills and abilities opted for the test method as opposed to the log book system. Roach et al (1997) suggest that personality and self-perception differences may encourage novices to choose one system over another. They concluded that:

The current study indicates that there is little difference in the driving outcomes of young drivers who have completed the test and log book methods. The statistical and anecdotal evidence suggests that drivers who consider themselves to be more skilful and want their licence quickly choose the test method, whilst those who are less confident in their driving ability and have the available funds choose the logbook method. Correlational analysis has shown self-ratings of safety⁷, and to a lesser extent skill, may be more useful indicators of various driving outcomes than method of licence obtainment. (p5)

These findings are perhaps to be expected, as the competencies contained in the log book system and assessed on a cumulative basis are the same as those contained in the standalone test. While the training method may differ, the required competencies for licensing are the same. The findings of Roach et al (1997) tend to undermine arguments that log book systems are superior on learning and road safety grounds. They also reinforce the reality that training has no inherent value of its own and serves only to raise skill and knowledge levels to meet the minimum competencies required for driver licence issue (Macdonald, 1987; McKnight, 1992). The role of the licensing authority is to specify the required competency standards and to ensure that they are consistently and equitably applied to applicants.

3.8.2 Comparison of CBTA and CBA in SA with Novice Driver Outcomes in NSW

A comparative study of accumulation of driving experience under the SA CBTA ("logbook" system), the VORT and the NSW competency based test (DART – based on the ADOPT) was conducted for Austroads by ARRB Transport Research (Catchpole, 1998). This study extensively surveyed 720 newly licensed drivers, comprising 240

⁶ - where respondents completed survey questions and self-ratings to provide the data, rather than the researchers objectively collecting the information on each variable of interests.

⁷ Those who rate themselves as less safe, less confident tend to have a better driving record. The view is that they have a more realistic view of their own abilities and drive accordingly. (consultant's clarification)

licensed under each system, with equal proportions of males and females and two thirds of each group from metropolitan areas.

The study found no particular benefits for CBTA licensed drivers over the other two systems. Curiously, NSW licensed drivers had held their learner permits longer, had greater hours of practice prior to licensing and took more professional (commercial) lessons. Relative to VORT licensed drivers, CBTA licensed drivers:

- tended to be female and younger;
- took a greater number of professional lessons;
- held the learner permit for a shorter period of time;
- had less hours of practice driving time (ie other than on paid lessons); and
- spent more money to achieve licence level competency.

A preference for CBTA was found among younger novices, but decreased with age and disappeared by age 20. This may reflect the support among many parents for CBTA, increasing independence with age among adolescents and the ability to obtain a licence faster via the VORT than via CBTA.

Country novices in both NSW and SA were more reliant on practice as opposed to commercial instruction, perhaps due to the lower availability of driving schools in non-metropolitan areas. Indeed, this suggests that CBTA using commercial instructors may not function well in country and/or remote areas, unless parental or other non-commercial supervision/instruction can be substituted. Models whereby parents and other adults provide supervision and instruction under systems somewhat akin to CBTA have been trialled in Sweden and found to be no better or worse than systems where there is only private instruction or a mixture of commercial and private approaches (Gregersen, 1994).

Catchpole (1998) also noted that there was a perception among CBTA graduates and the SA community that CBTA was superior to the VORT method of gaining a licence as it was perceived to provide more practice and experience and gave novices more time to learn. This view existed even though gaining a licence via CBTA cost the applicant more. However, the results of the study showed this perception to be fallacious. Catchpole sums this up as follows:

None of these beliefs is supported by the self-reported data on driving experience collected in the survey. Thus the strong community preference for CBTA [two thirds of licences are now gained via CBTA] appears to be founded on misconceptions as to the amount of driving experience gained under each of the two licensing frameworks. In this sense, the current implementation of CBTA appears not to be living up to community expectations. The only area of experience where CBTA graduates have the advantage over VORT graduates is experience gained during professional lessons. It may be that the perception that CBTA gives learners more experience is based on consideration of professional lessons only.

Catchpole also reported that paid lessons and practice with a parent, friend or relative were viewed as alternatives, with those who took the CBTA route having less practice than those who took the VORT route. There was also a perception that paid lessons were superior to practice with other supervisors. However, the results of Roach et al's (1997) study and the review findings of Lonero et al (1995), Lynam & Twisk (1995) and Watson et al (1995)

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would suggest that there is little evidence to support the superiority of commercial instruction over private instruction in crash reduction or proficiency terms. This applies in respect of CBTA, CBA and more traditional approaches to driver training and licensing.

3.8.3 Concluding Comments on CBTA

In conclusion, therefore, there is little evidence to suggest that CBTA programs produce safer and more proficient drivers than CBA systems (ie those with competency based tests such as NSW or Victoria). CBTA systems appear to be more economical for the licensing authority as their costs in providing licence examiners or testing officers are reduced. However, it would appear that the costs are transferred to the licence candidates who pay more for the commercial instruction required under CBTA systems. It could therefore be argued that CBTA increases costs for applicants for no apparent gain other than a community perception (misconception) that the novices trained and licensed under CBTA are somehow superior to those who undergo licence assessment only via CBA.

4 BENEFITS IN DEVELOPING A NATIONAL STANDARD

4.1 Background

A principal aim of this project was to determine whether there are net benefits in a nationally uniform approach to driver education, training and testing, in order to assist the NRTC in deciding whether to pursue the development of a national standard.

To this end the benefits of developing a national standard were examined in respect of three major areas:

- a. potential road safety benefits (ie reduced crashes or crash risk);
- b. reduced costs due to potential improvements in the efficiency/effectiveness of driver licence testing and assessment; and
- c. potential validity, reliability and equity improvements (ie better tests and assessment systems that target the required competencies, skills and knowledge in a fair and equitable manner).

As detailed economic and evaluatory information was not available to the consultant, consideration of the benefits of developing a national standard for driver licensing assessment was difficult to quantify. For this reason, areas of potential benefit in respect of these three areas were outlined in broad terms, rather than in detail.

4.2 Potential Crash-Reduction Benefits

Given that few on-road licence tests have been shown to have predictive validity⁸, it is unlikely that adoption of nationally uniform standards for such tests would lead to reductions in casualty crashes among drivers. Similarly, as driver training is shaped largely by licensing requirement standards, it is unlikely that national approaches to driver training would produce casualty crash reductions. Furthermore, numerous evaluations of the crash-reduction effects of conventional driver/rider training have failed to find any significant effects (Christie, 1996).

In respect of theory/knowledge tests, there is some evidence that driver manuals and associated tests developed under sound educational/assessment guidelines may produce small crash reduction benefits. However, as all jurisdictions already have theory tests and manuals (albeit of varying quality), the likelihood of national standards leading to casualty crash reductions is low. While it is likely that any small crash reduction benefits have already been realised by each jurisdiction, it is possible that uniformly raising the quality of theory tests, accompanying manuals and supporting audio-visual materials may produce a marginal, but positive road safety benefit.

The only driver licence assessment tool that appears to hold some promise of casualty accident reduction is hazard perception testing. Given that the ACER study has established that the HPT has predictive validity, the use of a nationally standardised HPT to detect novice drivers at higher risk of crash involvement may be a useful means of reducing crash

⁸ - can predict drivers who will be at greater crash risk, or discriminate between higher and lower risk drivers.

involvement. As the full details of the ACER HPT evaluation are not presently available, it is not possible to estimate the likely crash reduction impact of applying HPT across all Australian driver licensing jurisdictions. However, once the report is released (expected by September 1999), it should be possible to estimate its road safety value.

It should be noted that HPT has only been applied to probationary licence applicants in Victoria and may need to be more extensively validated across Australia. Furthermore, as noted above, there may be merit in considering placing a HPT at the end rather than the beginning of the provisional/probationary licence period. HPT may also have merit in respect of other licence classes, however, further research would be required to establish this.

From a road safety perspective, adoption of a national approach to driver licensing and associated training may lead to indirect benefits through the ability of developmental, operational and crash data to be pooled at a national rather than jurisdictional level. This would improve the situation of the smaller jurisdictions such as ACT, NT and Tasmania that struggle to generate the critical mass required for quantitative analyses of test results or crash reduction effects. It may also reduce the overall lead or lag time in evaluations of driver licensing initiatives. However, the downside may be the loss of other jurisdictions for comparison or experimental control purposes.

In summary, the potential road safety benefits of adopting a standardised, national approach to driver licensing and associated training are likely to be small and centred on screen-based tests of perceptual-cognitive abilities such as hazard perception, rather than on improved in-vehicle testing of vehicle control skills.

4.3 **Potential Efficiency and Effectiveness Benefits**

Despite the relatively low likelihood of road safety gains, there may be efficiency and effectiveness benefits in developing a national driver assessment standard. For example, the imminent introduction of the Australian Road Rules, due to be adopted nationally in December 1999 may provide an opportunity to develop standard tests of road law knowledge and to produce standardised handbooks, manuals and associated educational/training materials. Discussions with VicRoads printing services manager suggest that, in terms of economy of scale, a nationally published driver licence handbook for car drivers (the largest applicant group) could reduce production and printing costs by 30% to 40%, assuming quarterly production runs to accommodate periodic amendments (personal communication, Roger Cagliarini, VicRoads Printing Services, 24 May 1999). It is acknowledged, however, that road law is only part of theory test content and that jurisdictions will continue to differ in policies and procedures that may make adoption of nationally standardised tests and training materials difficult to achieve.

Costs in the development, review and introduction of licence tests may be reduced if a national approach was to be adopted as costs could be pooled across jurisdictions. This would particularly assist smaller jurisdictions with more limited resources. Innovations such as Internet presentation, transmission of randomised theory/knowledge tests and HPT could be delivered nationally at lower unit cost than if introduced into even a populous state such as Victoria. Savings resulting from harmonisation and national delivery could be used to fund the monitoring, evaluation, and periodic upgrading of driver licensing

assessment tools and resources. However, care would need to be taken under a national approach to driver licence assessment and training to ensure that creativity and innovation were not stifled.

It is clear from the foregoing report that the duration of licence tests, particularly on-road tests vary across the country. Jurisdictions that conduct tests of long duration operate at lower levels of efficiency than those with shorter tests. Leaving aside content issues, a jurisdiction that conducts car on-road test of 40 to 50 minutes duration operates at half the efficiency of one that has 20 minute duration tests.

Jurisdictions with the largest populations and largest number of car licence applicants, ie Victoria and NSW, have the shortest duration on-road tests. There is no evidence that drivers in these jurisdictions are less safe or competent than those in other jurisdictions. On the contrary, the fatality rates in NSW and Victoria are below those of most other states/territories (Hakkert & McGann, 1996). However, the relatively low casualty rates enjoyed in these states are most likely due to a combination of factors (eg enforcement, road safety promotion and road environment improvements), rather than the result of driver licensing practices alone.

Hakkert & McGann's (1996) report showed that SA, Victoria and NSW had the lowest road fatality rates per capita for the 17-24 year old age group in 1992 – the age band that contains the majority of novice drivers. In respect of serious injury rates for 17-24 year olds, NSW, Tasmania and SA had the lowest rates per capita. While Table 1, extracted from Hakkert & McGann (1996), shows ACT as having the lowest rates, the authors noted that ACT rates may be unreliable due to the small number of fatalities and serious injuries per annum. This comment was also extended to rates for the Northern Territory and Tasmania, but to a lesser degree.

As noted above, it would be unreasonable to attribute lower or higher levels of road fatality or casualty rates in particular jurisdictions to the influence of driver licensing, assessment and training requirements alone.

Table 1: Fatality and Casualty Rates for 17-24 Year Olds by State

State/Territory	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	ALL
Fatals/10 ⁵ Population	23.4	20.0	29.5	19.3	33.0	33.0	61.5	6.7	24.5
Serious Injury/10 ⁵	228.7	313.7	313.5	258.0	374.0	270.0	500.0	127.2	238.8
Population									

(source: Hakkert & McGann (1996), Table E8, p 84)

The development of tests such as the ADOPT showed that tests of 40-50 minute duration were not necessary, as these were no more valid or reliable than instruments of half the length (provided the test concentrated on key competencies). It is of note that one of the US DOT's objectives in funding the development of model tests such as the ADOPT and TORQUE was to reduce testing time, to reduce testing costs and improve efficiency. Jurisdictions that conduct long on-road tests for particularly car drivers may be expending extra resources for little gain. There may be merit, therefore, in developing a nationally agreed battery of efficient and effective on-road tests that are a short as possible. A nationally uniform approach to driver competencies and assessment standards may also assist the driver training industry. For example, major training providers such as DECA, that operate heavy vehicle driver training in several states, currently cope with differing licensing standards and expectancies. The efficiency and effectiveness of training operations may be improved if truck and bus driver training could focus on a nationally agreed set of competencies and a common approach to the assessment of these (personal communication, Ian Bushby, Managing Director, DECA, 21 May 1999).

From a best practice perspective, there cannot be eight best ways to conduct driver licence assessment across Australia. There would appear to be little merit in each state/territory adopting its own approach to driver licence assessment testing. While driver licensing policy is a state/territory function, best practice cannot be achieved by each jurisdiction going its own way. It is suggested that the development and implementation of agreed national standards in respect of driver licence assessment would bring Australia closer to world's best practice. To draw an analogy, if it makes sense to have uniformity in respect of traffic laws, in the form of the Australian Road Rules, it equally makes sense to pursue a uniform and national approach to driver licence assessment. Savings in terms of financial and human resources, as yet unquantifiable, could be expected to flow from such as approach.

In summary, there would appear to be potential efficiency and effectiveness benefits in adopting a standardised, national approach to driver licensing and associated training. However, the extent of these benefits cannot be quantified at present and presupposes that individual jurisdictions were sufficiently motivated to develop, adopt and operate nationally uniform approaches to driver licensing associated training. This issue was beyond the scope of this project.

4.4 Potential Benefits of Improved Validity, Reliability and Equity

Regardless of crash-based or efficiency considerations, it may be prudent to consider the benefits of improving and standardising the validity and integrity of driver assessment and testing. This report suggests that, in the main, the validity, reliability and integrity of driver testing and assessment varies across Australian jurisdictions, with most driver licensing authorities apparently unaware of the true validity and reliability of driver assessment measures that they use. With only a few exceptions, most Australian driver licensing authorities do not monitor applicant performance in terms of pass and fail rates, which provide vital clues to the validity/reliability of tests. This is of concern, as it suggests that driver licensing assessment may not be validly targeting the core skills related to the safe and competent operation of motor vehicles and may not be doing so reliably. The wide variation in theory and practical test pass rates noted above tends to support this view.

From an equity point of view, it is incumbent on licensing authorities to ensure that the driver licence assessment tools that they employ are fair and equitable to all applicants. Driver licensing is a baseline function for all jurisdictions, which will continue year-in, year-out, and deserves attention. It matters not whether the actual testing is conducted by the jurisdiction itself or private providers; responsibilities in respect of validity, reliability and equity remain. The community would not accept unknown levels of validity and reliability in respect of Year 12 student assessment, so why should this be accepted in

respect of licence testing which touches almost every adolescent or adult in the community?

It may be more prudent to look at validity, reliability and equity issues in driver assessment at a national rather than jurisdictional level. This is not suggested as a means of diminishing state rights, but rather because it may be easier to look at one set of common issues from a fresh perspective than to examine eight approaches and attempt to reconcile differences. A national driver licensing assessment system could be built upon first principles and guided by contemporary test development and evaluation principles. The benefits would be a more valid and reliable system that is fair to applicants. However, given that there are currently few nationally agreed standards or principles, as evidenced by the failure of the Austroads draft novice driver competencies to be universally adopted, the road to national standards may be long and difficult to travel.

A potential economic benefit of a standardised approach would lie in reducing "rework" in the form of retesting as only those who did not truly meet the minimum standards should fail the tests on the first attempt and be required to return. There is something dysfunctional about driver licence assessment systems that require large proportions of applicants to return for retesting (about 30-40% appear to require retesting). Reasons for this may be:

- that tests are low on validity and reliability due to poor design;
- that tests suffer the effects of operational bias/subjectivity;
- that training resources available may be inadequate;
- that information provided to applicants about what to expect may be insufficient;

or a combination of all of these factors. Tests of unknown or low validity/reliability cost the community money and unnecessarily waste valuable time and resources.

While the limitations of what can be achieved in respect of driver licence assessment as outlined above are recognised, there would appear to be potential community and economic benefit in developing a national approach to driver licence assessment based on the principles of validity, reliability and equity. If there is a legislated necessity to engage in driver licence testing, then it would appear to be prudent to ensure that assessment is fair, valid and reliable.

4.5 Concluding Comments on Benefits of Developing National Standards for Driver Licensing Requirements and Performance Standards

The potential road safety benefits of adopting a standardised, national approach to driver licensing and associated training are likely to be small and centred on screen-based tests of perceptual-cognitive abilities such as hazard perception, rather than on improved invehicle testing of vehicle control skills.

Although not quantifiable at present, there would appear to be some potential efficiency and effectiveness benefits in adopting a standardised, national approach to driver licensing and associated training. Given that there is a legislated requirement in each jurisdiction to engage in driver licence testing, it would seem prudent to ensure that this assessment is as fair, equitable, valid and reliable as possible. In view of this, there would appear to be potential community and economic benefit in developing a national approach to driver licence assessment that is equitable, valid and reliable. Testing and assessment that does not conform to these three principles is not only unfair to applicants, but is inefficient and less effective than it could otherwise be.

Not withstanding these conclusions on the potential benefits of a national approach, it is not known to what extent individual jurisdictions are sufficiently motivated to develop, adopt and operate nationally uniform approaches to driver licensing associated training. This would need to be tested by the NRTC through consultation with the driver licensing jurisdictions.

5 OVERALL CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The results of the collation and analysis process in respect of driver licensing requirements and performance standards, including driver and rider training, suggest the following conclusions:

5.1.1 Existing driver testing and assessment arrangements used throughout Australia

- 1. There appears to be little uniformity in driver licence testing and assessment across Australia - no two systems are the same. Tests vary in duration, complexity, and scoring arrangements. In general, licence tests tend to be high on face validity but have little predictive validity, which limits their value as road safety measures.
- 2. Driver licensing testing requirements tend to be a mix of what is desirable in competency and safety terms, what is achievable in respect of educational and human developmental capacity, tempered by the reality of what the community and individual governments will accept as reasonable.
- 3. Revisions and changes to testing and assessment are not made on a national basis, but rather in response to jurisdictional dictates, resulting in individual jurisdictions falling along a continuum of development, with some often leading and others following sometimes years later.
- 4. Driver licensing standards largely determine what licence applicants will learn and what training and educational materials are provided licensing standards drive training standards, not the other way round.
- 5. Driver training in itself has little value unless it addresses the development of competencies that must be achieved for licence qualification (or employment in the case of truck and bus drivers). There is little motivation or incentive for candidates for any class of driver licence to learn more than that required to gain a licence, permit or other certificate.

5.1.2 Comparative effectiveness of the various practices

- 6. There have been few comparative evaluations of driver licence test/assessment components used in Australia or related training programs and materials.
- 7. Few on-road tests in use in Australia or overseas have been subjected to empirical evaluation during their development or following their introduction. NSW, SA, NT (in part) and Victoria employ on-road tests based on psychometrically developed and evaluated models (ie the ADOPT and TORQUE). These tests approximate best practice and are based on fair and reliable models, but have little predictive validity

in crash reduction terms. New tests introduced into WA (1999) and Queensland (1998) are yet to be evaluated.

- 8. The Hazard Perception Test appears to be a driver assessment technique with the potential to reduce novice driver crashes. Victorian research suggests that it is reliable and, unlike other driver licensing tests, has predictive validity.
- 9. There is little scientific evidence that competency based training and assessment (CBTA) programs produce safer and more proficient drivers than competency based assessment (CBA) systems. CBTA appears to increase costs for applicants for no apparent gain other than a community perception (misconception) that the novices trained and licensed under CBTA are somehow superior to those who undergo licence assessment only via CBA. Competency standards are the same under CBA and CBTA.

5.1.3 Benefits in developing a national standard

- 10. There would seem to be considerable scope for national uniformity and common approaches to the assessment, and perhaps preparation of drivers across Australia. In particular, there is room for improvement in the efficiency and effectiveness of driver assessment.
- 11. Best practice in driver licensing assessment cannot be achieved by each jurisdiction going its own way in respect of test development and the production of related training programs and materials. There cannot be eight best ways of licensing drivers.
- 12. There may be some small economic, administrative and safety benefits to be gained in adopting a uniform approach to the production of licence manuals and associated knowledge theory tests. The advent of the Australian Road Rules may provide a common starting point for such a process.
- 13. Adoption of a uniform, national approach to driver/rider training and licensing assessment would increase the size of the consistently trained/assessed driver and rider pool, and would correspondingly increase the likelihood of being able to assess the road safety, efficiency and effectiveness of procedures and initiatives.
- 14. Consistency may provide better opportunities for drivers to be assessed anywhere, with certificates of competency that would be recognised in all jurisdictions for licensing purposes.
- 15. The extent to which individual Australian jurisdictions are sufficiently motivated to develop, adopt and operate nationally uniform approaches driver licensing associated training is unknown.

5.2 **Recommendations**

Given that the development and adoption of national standards in respect of driver licensing assessment have the potential to improve validity, reliability and equity, and may also contribute to reduced crash risk and reduced operational costs, it is recommended that this report be used to:

- Determine the level of interest among individual Australian jurisdictions in developing, adopting and operating nationally uniform approaches to driver licensing assessment and associated training.
- Highlight areas of potential benefit in developing, adopting and operating nationally uniform approaches to driver licensing assessment and associated training in discussions with driver licensing authorities.

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APPENDIX A

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Collated Survey Returns on

Driver Licensing Requirements and Associated Training

COLLATED SURVEY RETURNS ON DRIVER LICENSING REQUIREMENTS AND ASSOCIATED TRAINING

Legend:	Abbre	eviations and Notes
Jurisdictions	ACT	Australian Capital Territory
	NSW	New South Wales
	NT	Northern Territory
	Qld	Queensland
	SA	South Australia
	Tas	Tasmania
	Vic	Victoria
	WA	Western Australia
Other	LR	Light Rigid (truck/bus)
	MR	Medium Rigid(truck/bus)
	HR	Heavy Rigid (truck/bus)
	HC	Heavy Combination (truck/bus)
	MC	Multi Combination (truck/bus)
	Prov	Provisional (licence)
	D 1	

Prob Probationary (licence)

Notes eg ACT (1) refers to the first note in respect of ACT driver licensing requirements – all notes are listed in alpha – numerical order (ie by jurisdiction and number) order at the end of the tables in Appendix A.

	Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance Standards	Ca	ar	Motorc	ycle		F	Heavy Veh	icle	Vic NSW			
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC			
Theory/Knowledge Tests 1. What is the format of the theory/knowledge test required?												
a. written only	ACT		ACT(1)		ACT, Qld. Tas	Qld, Tas	Qld, Tas	ACT, Qld. Tas.				
b. written, oral if candidate is illiterate	NT, Qld, SA(1), WA(1)		NT, Qld SA, WA(1)			NT	NT					
c. computerised only d. computerised with audio support for illiterate candidates	Tas(1) NSW, Vic	Vic	Tas(1) NSW, Vic (1)	Vic(1)	NSW, Vic(1)	NSW Vic(1)	NSW, Vic(1)	NSW, Vic(1)	NSW			
e. Other 2. Is the theory/knowledge test of multiple choice format?		Tas(2)					WA (2)	WA(2)				
a. Yes	ACT, NSW, NT, Qld, SA Tas, Vic, WA	Vic	ACT (2) NSW, NT, Qid, SA,		ACT, NSW, Qld, Tas, Vic		NSW, NT, Qld Tas, Vic	ACT, NSW, Qld, Tas,	ACT ,NSW, Qld, Vic			
b. No		Tas (oral)	Tas, Vic, WA					Vic				
3. How many items/questions are in the test?	30(ACT) 45(NSW) 30 (NT) 30 (Qld,1) 52(SA) 30 (Tas) 32(Vic) 30 (WA)	12 (Tas) 15+12 (Vic, 2)	45(NSW 52 (SA)) 5 (Qld)(1) 30 (Tas) 32 Vic) 15 (WA)	15+12 (Vic,2)	30(ACT) 45(NSW) 10 (Qld) (1) 30 (Tas) 32 (Vic)	(1) 30 (Tas) 32 (Vic)	10 (Qld,1)) 30 (Tas) 32(Vic) 10 (WA)	30 (Tas) 32 (Vic) 10 (WA)	30(ACT) 45(NSW) 10 (Qld,1) 30 (Tas) 20 (Vic)			
 4. How many items must be correctly answered to pass? 5. What is the content of the test? 	26(ACT) 41(NSW) 24 (NT) 27 (Qld, 2) 42 (SA) 26 (Tas,3) 28(Vic) 24 (WA)	12 (Tas) 11+50% (Vic)	41(NSW 27 (Qld,2) 42(SA) 26(Tas,3) 26 (Vic) 12 (WA)	11 + 50% (Vic)	26(ACT) 41(NSW) 4 (Qld) 27 (Tas)	41(NSW 8 (NT) 8 (Qld) 27(Tas) 26 (Vic)	41(NSW) 8 (Qld) 27 (Tas) 26(Vic) 8(WA)	26(ACT) 41(NSW 8 (Qld) 27 (Tas) 26(Vic) 8 (WA)	26(ACT) 41(NSW 8 (Qld) 17 (Vic)			

				Type/	Class of Licenc	e			
Driver Licensing Requirements, Assessment and Performance Standards	Car	r	Motorc	ycle		I	Heavy Vehi	cle	
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC
	ACT, NSW, NT, Qld, SA, Tas, Vic, WA	Tas, Vic	NSW, NT, Qld, SA, Tas, Vic WA		Qld, Tas, Vic			Qld, Tas,	ACT, NSW, Qld, Vic
b. safe driving practices/road craft	ACT, Qld, NSW, Tas WA		ACT, NSW, Qld, SA, Tas, Vic, WA		ACT, NSW, Qld, Tas, Vic		NSW, NT, Qld,	Qld, Tas,	ACT, NSW, Qld, Vic
c. Other (please give details)		Vic(HPT)		Vic (HPT)	Tas (4)	NT(1) Tas (4)	NT(1) Tas.(4), WA (3)	Tas(4), WA(3)	
	8 (ACT) 9 (NSW) 15 (NT) 0 (Qld, 3) 20 (SA) 0 (Tas) 16 (Vic) 0 (WA)	16 (Vic)	9 (NSW) 15(NT) 0 (Qld, 3) 20(SA) 0 (Tas) 0 (Vic,3) 0 (WA)	0 (Vic,3)	0 (ACT) 0 (Qld, 3) 0 (Tas)	0 (NT)	9 (NSW) 0(NT) 0 (Qld, 3) 0 (Tas)	9 (NSW) 0 (Qld,3)	0 (ACT) 9 (NSW) 0 (Qld, 3) 0 (Vic,3)

ACT 1: theory test required only where applicant does not already hold car licence/permit

2: motorcycle test incorporated into rider training courses

- NT 1: content includes weight & dimensions
- Qld 1: base learner test is 30 items, plus 5 additional questions for motorcyclists and 10 for heavy vehicle licence applicants
- 2: 9/10 required in first section & 18/20 in second section of these tests 3: interpreter/translator assisted tests available at Departmental cost
- SA 1: Theory test is same for motorcycle and car learner permit applicants
- $Tas \qquad 1: written test available for those who have difficulties with computerised test$
 - 2: oral test conducted by testing officer prior to practical driving test
 - 3: includes 12 compulsory questions
 - 4: heavy vehicle regulations
- Vic 1: motorcycle and heavy vehicle providers only have written versions of tests
 - 2: 12 questions are Hazard Perception items
 - 3: interpreter tests available for these classes and for car (L & P) where written or on-screen test is not available
- WA 1: computer based theory tests currently being developed
 - 2: National Heavy Vehicle Driver Licence classes not adopted, these categories closest to current WA classes for heavy vehicles
 - 3: test covers penalties for infringements

	Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance Standards	Car	•	Motor	rcycle	· · · · · · · · · · · · · · · · · · ·	<u></u>	Heavy Veh	'ehicle				
	Learner	Prob Prov	Learner	Prob /Prov	LR	MR	HR	НС	MC			
Theory/Knowledge Tests												
	<89 (ACT) 90(NSW) 84 (NT) 93 (Qld) ??(SA) 80's(Tas) 96 (Vic) ?? (WA,4)		90(NSW) 93 (Qld) ?? (SA) 80's (Tas) 96 (Vic) ?? (WA, 4)	96 (Vic)	94 (ACT) 90(NSW) 93(Qld) 88 (Tas) 96 (Vic)) 93(Qld) 88(Tas)	90(NSW) 93(Qld) 88(Tas) 96 (Vic) ?? (WA, 4)	90(NSW) 93(Qld) 88(Tas)	94 (ACT) 90(NSW) 93(Qld) 95 (Vic)			
8. When was the test last revised?	99(NSW,1) 96 (NT) 92(Qld) 96 (SA,,2) 96(Tas) 96 (Vic) WA(5)	96 (Vic)	Nil (NSW) 92(Qld) 96 (SA) 96 (Tas) 96 (Vic) WA(5)	96 (Vic)	99 (NSW) 92 (Qld) 96 (Vic)	99(NSW) 96(NT) 92(Qld) 96 (Vic)	99 (NSW) 92(Qld) 96 (Vic) WA(5)	92(Qld)	99 (NSW) 92(Qld) 95 (Vic)			
9. Has the test ever been formally evaluated to determine its			1		<u> </u>	<u> </u>						
validity &/or reliability as a testing instrument or road safety effects												
a. No, never	NSW, NT, Qld(4) SA, Tas, WA	Tas	NSW, NT, Qld(4) SA, Tas, WA		NSW, Qld(4) Tas	NSW, NT, Qld(4) Tas	NSW NT, Qld(4) Tas, WA	NSW, Qld(4) Tas, WA	NSW, Qld(4) Tas			
	93 (ACT, 3) 80's (Vic)	80's (Vic)	80's (Vic)	80's (Vic)	93 (ACT, 3) 80's (Vic)			93 (ACT,3) 80's (Vic)	93 (ACT, 3) 80's (Vic)			
10. The test was developed as follows:												
	ACT, NSW NT, Qld, Tas		NSW, NT, Qld, Ta WA	S,	NSW, Qld, Tas	NT, Qld,	NSW, NT, Qld,	NSW, Qld, Tas, WA	NSW, Qld. Vic			
	WA ACT		Αw		ACT, Vic NSW, Tas(5)	Vic NSW	NSW .	ACT, Vic NSW Tas(5)	ACT NSW			

				Type/	Class of Licer	nce				
Driver Licensing Requirements, Assessment and Performance Standards	Car		Motoro	cycle			Heavy Vehicle			
	Learner	Prob Prov	Learner	Prob /Prov	LR	MR	HR	HC	MC	
d. Other	SA (3), Vic(4)	Vic(4)	SA, Vic(4)							
11. Is the pool of test questions kept confidential?										
a. Yes	ACT, NSW, SA, Qld, Tas, Vic, WA (6)	Tas	NSW SA, Qld Tas, Vic WA(6)		ACT, NSW, Qld, Tas, Vi		NSW, Qld Tas, Vic, WA(6)	Qld, Tas, Vic,	ACT, NSW, Qld, Vic	
b. No	NT(2)		NT(2)		and the second	NT(2)	NT(2)	WA(6)		
12. How many versions of the test are available for use?										
a. There are versions	5 (ACT) 4 (NT) 6 (Qld) 3(SA) 4(Tas), 5 (WA)		4 (NT) 6(Qld) 3(SA), 2 (Tas) 3 (Vic,5) 5 (WA)	3 (Vic)	2 (ACT) 3 (Qld) 1 (Tas) 3 (Vic, 5)	4 (NT) 3 (Qld) 1 (Tas) 3 (Vic 5)	4 (NT) 3 (Qld) 1 (Tas) 3 (Vic,5) NA (WA)	3 (Qld)	2 (ACT) 3 (Qld) 1 (Vic, 5)	
b. Each test is constructed of randomly selected items from the item pool		Vic	NSW		NSW	NSW	NSW	NSW	NSW	

ACT 3: no reports available

NSW 1: only parts of knowledge tests were upgraded

NT 2: test questions made available to schools

Qld 4: evaluation of all licence classes currently in progress

SA 2: currently underreview

3: developed in consultation with driving instructors & police

Tas 5: test version developed by external test providers

Vic 4: mixture of in house specialists and external developers

5: number of written papers only

WA 4: format of tests perhaps 30 years old – items have been updated over time

5: tests currently under review as part of revision of system and move to computerised approach

6: written test question swill soon be published on internet - oral questions/answers are provided to heavy vehicle applicants

				Type/C	Class of Licenc	e				
Driver Licensing Requirements, Assessment and Performance Standards	Car		Motorc	ycle			Heavy Veh	eavy Vehicle		
	Learner	Prob/ Prov	Learner	Prob /Prov	LR	MR	HR	НС	МС	
Theory/Knowledge Tests					1					
13. What fee is charged for this test?	Nil (ACT, NSW, NT, Qld, Tas, WA) \$20(SA) \$1550(Vic)		Nil (NSW, NT, Qld, Tas, WA) \$20 (SA) \$15.50(Vic)	(Vic)	Nil (ACT, NSW, Qld) \$12(Vic)	NT, Qld)	WA)	Nil (ACT NSW, Qld, WA) \$12(Vic)	Nil (ACT NSW, Qld) Vic (6)	
14. What % of the full cost of test provision does this fee cover?	0% (ACT(4), NSW,NT, Qld, Tas) ?? (SA,) 100% (Vic) 100%(WA,7)	100% (Vic)	0%, (NSW NT, Qld Tas) ?? (SA) 100% (Vic) 100% (WA,7)	100% (Vic)		0% (NSW, NT, Qld, Tas) 100% (Vic)	Tas)	(ACT(4)) NSW, Qld,	0%(ACT(4)) NSW, Qld) NA(Vic)	
15. What training aids &/or courses for candidates are available to support this test?										
a test manual/handbook for applicants (please indicate cost S)	\$5.5(ACT) \$0(NSW, Tas, WA) \$4.0 (Qld.5) \$2.0 (SA) \$4.5(Vic, 7)	\$0(Tas) \$4.5 (Vic,7)		\$5.5 (Vic)	\$7.5 (ACT) \$0(NSW, Tas, WA) \$4.0 (Qld,5)	\$0 (NSW, Tas) \$4,0 (Qld,5) \$7.5(Vic	\$0 (NSW, Tas, WA) \$4.0 (Qld.5) \$7.5(Vic)	\$0(NSW, Tas, WA) \$4.0 (Qld,5) \$7.5 (Vic)	\$0(NSW) \$4.0 (Qld,5)	
 b. video based on the manual/handbook (please indicate cost \$) c. audio tape based on manual/handbook (please indicate cost 		\$29.95 (Vic) \$10(Vic)			\$10(Vic)	\$10(Vic)	\$10(Vic)	\$10(Vic)		
d. Web site based on manual/handbook e. Other	ACT, SA, WA NSW(2) NT (3) SA(4) Tas (6), \$15(Vic,8)	\$15(Vic, 8)	WA NSW(2)		ACT, SA NSW(2)	NSW(2)	WA NSW(2)	WA NSW(2)	NSW(2)	

- 2: demonstration version of test available on 3.5 inch floppy made available to schools, libraries, driving schools at no cost NSW
- 3. Driver Training & Licensing Scheme provides 6 hours of non-compulsory theory tuition at no cost to 16 year olds, funded by NT Territory Insurance Office (TIO) - has not been evaluated 14
- 5: same handbook covers all licence classes Qld
- SA 4: ideo, audio tape & CD have been considered, but no final decision yet
- 6: school based driver evaluation program Tas
- Vic
- 6: test fee included in MC training course fee 7: Victorian Traffic handbook may cost more from commercial outlets (up to \$9.00) 8: Hazard Perception video & handbook package
- 7: test fee incorporated into \$46.30 licence application fee which covers theory and practical test costs WA

		Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance Standards	Car		Motore	cycle			Heavy Veh	icle					
	Learner	Prob/ Prov	Learner	Prob/P rov	LR	MR	HR	HC	MC				
Theory/Knowledge Tests							· · · · · · · · · · · · · · · · · · ·	·					
16. Have any of these training aids, courses or programs ever been formally evaluated to determine their educational and/or road safety effects?								·					
a. No, never	ACT, NSW, NT, Qld, SA, Tas, Vic,		NSW, NT Qld, SA		ACT,NSW, Qld, Tas, Vic			Qld, Tas,	ACT, NSW Qld, Tas, Vic				
	WA		Tas, Vic WA	•		Tas, Vic	Tas, Vic. WA	Vic, WA					
17. Does this test form part of a Graduated licensing System?													
a. Yes	NSW (3) SA(5), Tas	Vic.	NSW(3) SA, Tas Vic	Vic	NSW (3), Tas Vic		NSW (3) Tas, Vic	NSW (3) Tas, Vic	NSW (3), Vic				
	Vic												
b. No	ACT, NT (4) WA		NT (4) WA	,	ACT	NT(4)	NT(4), WA	ACT, WA	ACT				
18. Is this test linked to a Competency Based Training & Assessment System													
a. Yes			NSW, Tas		NSW(4)	NSW(4)		NSW(4)	NSW(4)				
b. No	ACT, NSW, NT, Qld, SA, Tas, Vic, WA	Vic	NT, Qld SA Vic, WA	, Vic	ACT, Qld, Tas Vic		NT, Qld, Tas, Vic, WA		ACT, Qld, Vic				
19. Are some candidates exempted from this test (excepting existing interstate licence holders, consular staff etc)?													
b. No	ACT, NSW, NT, Qld,(6) SA, Tas, Vic, WA		NSW, NT, Qld(6) SA, Tas Vic, WA		ACT, NSW, Qld(6), Tas Vic,	NSW, NT,, Qld(6) Tas, Vic,	NSW, NT, Qld(6) Tas, Vic, WA	ACT, NSW, Qld(6), Tas, Vic, WA	ACT, NSW, Qld(6), Vic				

NSW 3: knowledge test completion required for learner licence issues and for each upgrade to a higher class

4: heavy vehicle licence applicants may opt for CBA or CBTA

NT 4: Licence system is graduated, but no further theory tests apply

Qld, 6: anyone who has passed the test for that category of licence within the last 5 years is exempted

SA 5: SA adopted National Common Licence Classes in November 1998

				Type/C	Class of Licenc	e											
Driver Licensing Requirements, Assessment and Performance Standards	Car	Car Motorcycle				_	Heavy Veh	icle									
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC								
Theory/Knowledge Tests																	
20. Are requirements for the administration and scoring of the test set out in a standardised testing manual?																	
	NSW(5), Qld, SA		NSW(5) Qld SA, Tas		NSW(5), Qld	Contraction of the second		NSW(5), Qld	NSW(5), Qld								
b. No	ACT, NT (5), Tas Vic(7), WA	Tas, Vic(7)	NT(5) Vic(7), WA		ACT, NT(5), Tas, Vic(7)	NT(5), Tas, Vic(7)	Tas, Vic(7) WA	ACT, Tas, Vic(7), WA	ACT, Vic(7)								
21. Are the test and its administrators subject to auditing?	· · · · · · · · · · · · · · · · · · ·																
a. Yes	NSW(6) NT (6),Qld Tas, Vic	Vic	NSW(6) NT(6), Qld Tas, Vic		NT (6), Qld	NSW(6) NT (6), Tas, Vic	Qld	NSW(6), Qld, Tas, Vic	NSW(6), Qld, Vic								
b. No	ACT, SA, WA	Tas	SA, WA		ACT		WA	ACT, WA	ACT								
22. Any other information or comments	NT (7)		NT(7)	l	NT (7)	NT (7)											

NSW 5: requirements set out in RTA Policy & Procedures Manual for Customer Services Officers 6: audits part of Compliance Unit audits and electronic analysis of data from DRIVES systems

5 clear instructions provided with each copy of test. Also in staff procedures manual NT

6 Auditing on ad hoc basis

7 Theory test materials and regime will be reviewed with the introduction of National Road Rules

Qld Vic 7: Drivers' Guide/Handbook undergoing complete review and update

7: instructions on each written paper or presented on-screen by computer

I uge mo	Page	A10

				ti time ne	Тур	e/Class of Lic	ence			
Driver Licensing Requirements, Assessment and Performance			Car	Motorc	ycle			Heavy Veh	icle	
Standards								-		
	Lea	mer	Prob/	Learner	Prob	LR	MR	HR	HC	MC
			Prov		/Prov					
Hazard Perception Test (HPT)									• • • • • • • • • • • • • • • • • • •	
1. Are licence applicants required to complete a Hazard Perception									-	
Test?										
a. Yes		94-45 - 54 - 54 - 54 - 54 - 54 - 54 - 54	Vic	Vic(8)			Vic(8)	Vic(8)	Vic(8)	Vic(8)
b. No						ACT, NSW,		NSW, NT,	ACT,NSW	ACT,NSW,
	NT,							Qld Tas,	, Qld NT,	NT, Qld, Tas
	SA,	Tas,	WA(8)	Tas, WA	Qld,	WA	Tas, WA	WA	Tas	WA
	Vic,				Tas,		ĺ		WA	
	WA				WA					
2. How many items/questions are in the HPT?			12 (Vic)							
3. How many items must be correctly answered to pass?			50%(Vic)							
4. In how many languages other than English is the test provided?			16(Vic							
5a. When was the current HPT first introduced?			96(Vic)							
5b. When was the test last revised?			Ongoing			1			T	
			(Vic)							
6. Has the test ever been formally evaluated to determine its validity								1		
&/or reliability as a testing instrument or										
road safety contribution										
b. Yes, in 19			92/93 &		ļ					
			Current							
			(Vic, 9)							
7. The test was developed as follows:										
b. "In house" by specialist test developers			Vic		1					
8. Is the pool of test questions kept confidential?										
a. Yes		and a second of the loss of th	Vic							
9. How many versions of the test are available for use?			4	ļ]				
10. What fee is charged for this test (in dollars?			Nil (Vic,10)							
11. Does this fee cover/recover the full cost of test provision?										
a, Yes			Vic						Sector 1	

Vic 8: only if car licence not already held 9: current evaluation report from ACER due for imminent release 10: part of knowledge test fee, \$12.00
 8: HPT will be developed for use in WA, in consultation with VicRoads

WA

				Type/0	Class of L	cence		<u> </u>	
Driver Licensing Requirements, Assessment and Performance Standards	Ca	r	Moto	rcycle			Heavy Ve	hicle	e de la construcción de la constru
	Learner	Prob/	Learner	Prob/	LR	MR	HR	HC	MC
		Prov		Prov					
Hazard Perception Test (HPT)									
12. What training aids &/or courses for candidates are available to									
support this test?									
a. test manual/handbook for applicants (please indicate cost: \$)	artes a series de	\$5.5(Vic)	6. Store 1.						
b. video based on the manual/handbook (please indicate cost: \$)		\$39.95							
		(Vic)							
13. Have any of these training aids, courses or programs ever been									
formally evaluated to determine their educational and/or road safety									
effects?									
a. No, never		Vic							
14. Are some candidates exempted from this test?							Julian Million and the second	and the second	and the second
a. Yes		Vic (11)				· · · ·			
15. Does this test form part of a Graduated licensing System?									
a. Yes		Vic							
16. Is this test linked to a Competency Based Training & Assessment									
System								1	
b. No		Vic							
17. Are requirements for the administration and scoring of the test set out									
in a standardised testing manual?									
b. No		Vic(12)							
18. Are the test and its administrators subject to auditing?			Station of the statement of the			101.000.000.000.000	10000 70700, complements, www.com	and a second	A second
a. Yes		Vic			1999 - 1997 -				

11: candidates who already hold motorcycle licence 12: computerised test. Vic

	Type/Class of Licence										
Driver Licensing Requirements, Assessment and Performance		Car	Motorcycle		Heavy Vehicle						
Standards	Learner Prob/					110	<u> </u>				
	Learner	Prod/ Prov	Learner	Prob /Prov	LR	MR	HR	HC	MC		
On Road Practical Tests		1100		/110v	-	• ····.	-				
1. What is the scoring format of the practical test required?						· ·····					
a. error checking/point deduction		Qld, Tas		Qld, Tas. WA	Qld, Tas	Qld, Tas	Qld, Tas, WA	Qld, Tas, WA	Tas		
b. objective, competency based (i.e. Yes/No categories)		ACT NSW, NT, SA(6) Vic, WA	ACT,		1 1	ACT NSW NT, SA Vic	ACT, NSW, NT,	ACT, NSW, NT. SA, Vic	ACT, NT, SA Vic		
d. Other				NT(8)	NSW(7)		NSW(7)N T(8)	NSW(7) NT(8)	NSW(7) NT (8), Qid (8)		
2. How is candidate test performance recorded?											
a. On a standardised, printed score sheet		ACT(5) NSW NT (9) Qld, SA, Tas, Vic WA	ACT(5)	Tas, WA	NSW NT (9) Qld, SA,	NT (9)	NSW, Qld SA, Tas		ACT(5), SA, Tas, Vic		
3. Does the test use standard test routes?											
a. Yes (please note number of test routes per site)		NSW (8) 5-8 NT 3 (SA) 6-18 (Vic), WA					6 (Qld.9) +	NSW(8) 6 (Qld.9) 2 (SA) 3 (Vic)	2 (SA) 2 (Vic)		
b. No		ACT, Qld NT (10) Tas		Qld, Tas, WA	ACT, Qld, Tas	ACT,	ACT, NT (10), Tas, WA	ACT, NT(10), Tas, WA	ACT,NT (10), Tas		

ACT 5: tests and test forms currently under revision, CBTA loosely based on SA model introduced in 1998

NSW 7: CBTA alternative available for heavy vehicle classes

8: approximately 2 test courses for every 1000 tests - test courses are randomly selected by computer

NT 8: Motorcycle tests scoring based on handwritten notes; some HV test providers do not use CBT principles

9: uses VORT (Vehicle on road test developed by Transport SA and adapted from ADOPT model)

10: Motorcycle applicant selects own route to mandatory destination. Destination has been selected as all routes encompass required situations HR, HC, MC routes chosen by tester to encompass known situations

- Qld 8: MC class assessment included in mandatory training course 9: average number of routes per site
- SA
- 6: clients may choose CBTA (log book) or VORT7: all MC candidates must attend road transport Training course Tas

	Type/Class of Licence									
Driver Licensing Requirements, Assessment and Performance		Car	Motor	cycle	Heavy Vehicle					
Standards	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	НС	MC	
On Road Practical Tests										
4. During the test, where is the testing officer positioned?										
a. In vehicle, front passenger seat		ACT, NSW NT, Qld, SA, Tas, Vic(13) WA			ACT, NSW NT, Qld SA, Tas Vic	NSW NT, Qid	Qld SA,	ACT, NSW, NT, Qld, SA, Tas, Vic, WA	Tas, Vic	
b. In vehicle, rear seat c. Outside vehicle		NT(11)	ACT, Tas,	ACT, NT (12) Qld(10) Tas, WA(9)						
5 Are persons other than the testing officer & candidate permitted in-vehicle during testing?										
a. No										
b. Yes		ACT (6) NSW(9) NT, Qld(11) SA(7) Tas (8) Vic (14) WA(10)			SA (7), Tas(8), Vic (14)	NSW(9) NT, Qld(11) SA(7)' Tas(8) Vic (14)	NT, Qld(11) SA (7), Tas(8), Vic (14) WA(10	Qld(11) SA (7), Tas(8), Vic (14) WA(10	NT, SA (7), Tas(8), Vic (14)	
6. How many assessable items are covered in the test?		22 (ACT, 7) 80 (NSW) Up to 80 (NT,13) 28 (Qld) 70 (SA) 53 (Tas) 16 (Vic) 43 (WA)		30 (Qld) 17 (Tas) 43 (WA)	28(Qld) 70 (SA)) 50 (Tas)	ACT) 100 (NSW) Up to 80 (NT, 13) 70 (SA) 50 (Tas) 24 (Vic)	(NT, 13) 28 (Qld) 80 (SA) 50 (Tas)	100 (NSW) Up to 80 (NT,13)	22(ACT) Up to 80 (NT) (13) 100 (SA) 50 (Tas) 24 (Vic)	

	Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance		Car	Motor	Motorcycle		Heavy Vehicle						
Standards												
	Learner	Prob/	Learner	Prob/	LR	MR	HR	HC	MC			
		Prov		Prov								
7. What is the overall duration of the test in minutes?		55(ACT)		25(NT)	80 (ACT)				80(ACT)			
		20		40 (Qld)	50 (NSW)		70(NSW)	70(NSW)	120(NT)			
		(NSW)		8hrs(Tas,		(NSW)	40(NT)	75(NT)	75 (SA)			
		35 (NT)		9)		35(NT)	70 (Qld)	85 (Qld)	35 (Tas)			
		40 (Qld)		35 (WA)	40 (SA)	70 (Q1d)		75(SA)	40(Vic)			
		40 (SA)				40 (SA)		35 (Tas)				
		35(Tas)			30 Vic)	35 (Tas)		30 (Vic)				
		20 (Vic)				30 (Vic)	35 (WA)	35 (WA)				
		50 (WA)										
8. What score (%) must be achieved to pass?		ACT(8)				ACT(8)	ACT(8)	ACT (8)	ACT(8)			
		90		Qld(12)	95(NSW)	95	95 (NSW)	95(NSW)	Qld(12)			
		(NSW)		Tas (10)	85(NT)	(NSW)	Qld(12)	Qld(12)	85 (SA)			
		80 (NT)		WA (9)			85 (SA)	85 (SA)	Tas(10)			
		85 (SA)			85 (SA)		Tas (10)	Tas(10)	80%(Vic)			
		Qld(12)					80%(Vic)	80%(Vic)				
		Tas(10)			80%(Vic)		WA (11)	WA (11)	1			
		85% (Vic)				80%(Vic						
		WA (11)				D D	ļ					
9. Which of the following would lead to an immediate/outright failure of the test?												
a. Failure to follow instructions		ACT	1	ACT,NT	ACT,	ACT,	ACT,	ACT	ACT, NT, SA			
		NSW		Tas, WA	NSW,	NSW,	NSW,	NSW, NT,	Vic			
	and the second	NT, SA			NT, SA,			SA, Vic				
		Vic, WA			Vic	Vic		WA				
b. Failure of low speed, parking or manoeuvring components		NSW,		NT (15),		NSW,	NSW, Qld		NT(16), SA,			
		Qld, SA,		Qld, WA	Qld	Qld, SA,		NT(16)	Tas, Vic			
		Tas, Vic			SA, Tas,	Tas, Vic	Vic, WA	Qld, SA	,			
		WA			Vic			Tas, WA				
e. performing an unsafe action that could have resulted in an		ACT		ACT, NT.			ACT,	ACT,	ACT,NSW			
accident	-	NSW				NSW	NSW, Qld,	NSW, NT	NT, SA,, Ta			
		NT, Qld		WA	NT, Qld,			Qld, SA,	Vic			
		SA, Tas				SA, Tas	Vic,	Tas, Vic,				
		Vic, WA	1		Vic		WA	WA				

	Type/Class of Licence										
Driver Licensing Requirements, Assessment and Performance	Car		Motorcycle		Heavy Vehicle						
Standards											
	Learner	Prob/	Learner	Prob/	LR	MR	HR	HC	MC		
		Prov		Prov							
d. Violating or disobeying a road law (e.g. speeding, failing to		ACT		ACT,	ACT,	ACT	ACT,	ACT,	ACT,NT, SA,		
give way)		NSW,		NT, Qld,	NSW	NSW	NSW, NT,	NSW, NT,	Tas, Vic		
		NT, Qld		SA, Tas,	NT, Qld,	NT, Qld	Qld, SA,	Qld, SA,	-		
		SA,, Tas		WA	SA,, Tas,	SA,, Tas		Tas, Vic,			
		Vic, WA			Vic	Vic	WA	WA			

- ACT 6: auditor allowed in test vehicles
 - 7: 22 competencies, each with up to 10 components
 - 8: no percentage specified, candidate only allowed one fail category across all 22 competencies

NSW 9: auditors allowed when conducting audits

- NT 11: If instructor wishes to ride in vehicle during test
 - 12: testing officer travels in separate vehicle (car or motorcycle) for practical licence test
 - 13: maximum number of performance checks is 80 (using VORT)
 - 14: Motorcyclist has to demonstrate safe, legal practices for majority of test
 - 15: If motorcyclist displays poor stability at low speeds
 - 16: If unsafe practices are shown when coupling/uncoupling trailers

Qld 10: Tester follows motorcycle candidate in other vehicle 11: only where cultural requirements or language difficulties dictate 12: percentage score not used, accumulation of 9 non-critical driving errors leads to failure or one critical driving error SA 7: Transport SA auditing officers

- Tas
 8: driving instructor, if chooses in exceptional circumstances parent, support person or police officer
- 9: Assessment occurs across 8-hour rider course
- 10: >10 point loss fail in car test >8 points in heavy vehicle test
- Vic 13: testing officer sits in rear seat if driving instructor is present
- 14: instructor can be present or other officers if testing officer and applicant agree
- WA 9: testing officer follows on another motorcycle 10: when training/assessing testing officers
 - 11: loss of 16 Fair marks or 4 Poor marks (4 Fairs = 1 poor mark)

	Type/Class of Licence										
Driver Licensing Requirements, Assessment and		Car	Moto	orcycle	Heavy Vehicle						
Performance Standards	Learner	Prob/ Prov	Learner	Prob /Prov	LR	MR	HR	HC	MC		
On Road Practical Tests	†				<u> </u>						
10 What is the content of the test?											
a. traffic law (please give % of total test)		37 (NSW) 20 (NT) 25 (Qld(5 (T as) Vic(15) WA(12)		25 (Qld)	35 (NSW) 20 (NT) 25 (Qld) Vic(15)	35 (NSW) 20 (NT) 25 (Qld) Vic(15)	35 (NSW) 25 (Old) Vie(15) WA(12)	35 (NSW) 25 (Qld) Vic(15) WA(12)	∇ic(15)		
b. safe driving practices/road craft (please give % of total test)		37(NSW 50 (NT) 25 (Qld) 80 (SA) Vic(15) WA(12)		50 (NT) 25 (Qld) WA(12)	35 (NSW) 45 (NT) 25 (Qld) 80 (SA) Vic(15)	35 (NSW) 45(NT) 25 (Qld) 80 (SA) Vic(15)	35 (NSW) 25 (Qld) 85 (SA) Vic(15) WA(12)	35 (NSW) 25 (Qld) 85(SA) Vic(15) WA(12)	90(SA) Vic(15)		
c. vehicle control skills (please give % of total test)		4 (NSW) 10 (NT) 25 (Qld) 80 (Tas) Vic(15) WA(12)		20 (NT) 25 (Qld) 80 (Tas) WA(12)	4 (NSW 15 (NT) 25 (Qld) 80(Tas) Vic(15)	4 (NSW 15 (NT) 25 (Qld) 80 (Tas) Vic(15)	4 (NSW) 25 (Qld) 80 (Tas) Vic(15) WA(12)	4 (NSW) 25 (Qld) 80 (Tas) Vic(15) WA(12)	80 (Tas) Vic(15)		
d. low speed manoeuvring (e.g. parking, reversing) (please give % of total test)		22 (NSW) 20 (NT, SA), 25 (Qld) 10 (Tas) Vic(15) WA(12)		0 (NT) 25 (Qld) 10 (Tas) WA(12)	26 (NSW) 20 (NT, SA) 25 (Qld) 10 (Tas) Vic(15)	26 (NSW) 20 (NT, SA) 25 (Qld) 10 (Tas) Vic(15)	26 (NSW) 25 (Qld) 15 (SA) 10 (Tas) Vic(15) WA(12)	26 (NSW) 25 (Qld) 15 (SA) 10 (Tas) Vic(15) WA(12)	10 (SA) 10 (Tas) Vic(15)		
e. Other (% of total test)		5 (Tas,11)		5 (Tas)	5 (Tas)	5 (Tas)	5 (Tas)	5 (Tas)	5 Tas)		
11. Must candidates pass all individual sections of the test?]			I		l		

	Type/Class of Licence										
Driver Licensing Requirements, Assessment and Performance Standards	Car		Motorcycle		Heavy Vehicle						
	Learner	Prob/ Prov	Learner	Prob /Prov	LR	MR	HR	HC	MC		
a. Yes		ACT, NSW SA, Tas Vic		Tas,	ACT NSW SA, Tas, Vic	ACT NSW, SA, Tas Vic	ACT , NSW, SA, Tas, Vic	ACT NSW, SA, Tas, Vic	ACT, NSW SA, Tas, Vic		
b. No		No (NT) Qld (13) WA		No (NT) Qld (13) WA	No (NT) Qld (13)	No (NT) Qld (13)	No (NT) Qld (13) WA	No (NT) Qld (13) WA	No (NT)		
12. When was the current test first introduced?		Late 80'S (ACT) 93 (NSW) Early 80's (NT) 98(Qld) 93(SA) 60s(Tas) 94(Vic) 99 (WA)			97(ACT) 99(NSW 98(Qld)) 94 (SA) 60s(Tas) 89 (Vic)	97(ACT) 99(NSW) 98(Qld) 94(SA) 60s(Tas) 89(Vic)	97(ACT) 99(NSW) 98(Qld) 96(SA) 60s(Tas) 89(Vic) WA(13)	97(ACT) 99(NSW) 98(Qld) 96(SA) 60s(Tas) 89(Vic) WA(13)	97(ACT) 96(SA) 60s(Tas) 95(Vic)		
13. When was the test last revised?		96(ACT) 93 (NT) 98(Qld) 98(SA) Ongoing (Tas, Vic) 99 (WA)	94 (NT)	88 (NT), 98(Qld) 98 (Tas) WA (13)	94(NT) 98(Qld) 98 (SA) ongoing (Tas) 98(Vic)	94 (NT) 98(Qld) 98 (SA) ongoing (Tas) 98(Vic)	80's (NT) 98(Qld) 98 (SA) ongoing (Tas) 98(Vic) WA (13)	80's (NT) 98(Qld) 98 (SA) ongoing (Tas) 98(Vic) WA (13)	80's (NT) 98(Qld) 98 (SA) ongoing (Tas)		
14. Has the test ever been formally evaluated to determine its validity &/or reliability as a testing instrument or road safety effects											
a. No, never		ACT, NSW NT (17) Qld(14) SA(8) Tas, Vic, WA		NT (17) Qld(14) Tas, WA	ACT,, NSW NT (17) Qid(14) SA, Tas	ACT, NSW NT(17) Qld(14) SA, Tas	ACT NSW Qld(14) SA, Tas, WA	NSW Qld(14)	ACT, SA' Tas		

NT 17: tests based on ADOPT which was based on extensive research in USA

SA 8: Current study being undertaken by Dr JackMcLean (RARU) to determine differences between crash/offence involvement of VORT and CBTA licensed drivers – due for completion by June 2000

4

- Qld 13: Candidates must pass pre-drive check, first part of 6-part test 14: resource and test performance currently being evaluated – to be followed by crash-based assessment
- Tas 11: roadworthiness check
- Vic 15: no proportions provided
- WA 12: no proportions provided 13: information not supplied

				Type/Clas	s of Licenc	e				
Driver Licensing Requirements, Assessment and Performance Standards		Car	Moto	orcycle	Heavy Vehicle					
	Learner	Prob /Prov	Learner	Prob/ Prov	LR	MR	HR	НС	MC	
On Road Practical Tests										
15. The test was developed as follows:						1			1	
a. "In house" by licence testing staff		ACT, Qld, Tas		NT, Qlđ Tas (12), WA	ACT, Qld Tas	ACT, Qld Tas	ACT,NT, Qld, Tas, WA	ACT, NT Qld, Tas, WA	ACT,NT, Tas	
b. "In house" by specialist test developers		ACT, NSW SA, Vic			ACT, NSW SA, Vic	ACT, NSW SA, Vic	ACT, NSW SA, Vic	Construction of the second processing of the second s	ACT, NSV SA Vic	
c. Externally by professional test developers		NT, WA	NT		NT	NT			Sector Contractor	
16.Are test route details kept confidential?										
a. Yes		NSW, Qld, Vic		Qld	NSW, Qld Vic	NSW, Qld, Vic	NSW, Qld Vic	NSW, Qld Vic	Vic	
b. No		ACT, NT, SA, Tas, WA	NT	NT, Tas, WA	ACT, NT SA, Tas	ACT,NT SA, Tas		ACT, NT SA, Tas, WA		
17. What fee is charged for this test?	\$0 (NT)	\$35 (ACT) \$32 (NSW) \$20(NT) \$29(Qld) \$30(SA) \$26 Tas \$29.95 (Vic) WA(14)	\$25(ACT) \$0 (NT) \$160 or \$220 Tas(13)	\$20 (NT) \$29(Qld \$25 or \$50 Tas(13) WA(14)	\$32(NSW	(T)	\$32(NSW) \$29(Qld \$20 (NT) \$68 (SA) Vic(16) WA(14)	\$32(NSW)	\$60(ACT) \$32(NSW) \$20 (NT) \$68 (SA) Vic(16)	

.

				Type/Clas	s of Licenc	e				
Driver Licensing Requirements, Assessment and		Car	Motorc		Heavy Vehicle					
Performance Standards										
	Learner	Prob	Learner	Prob/	LR	MR	HR	HC	MC	
		/Prov		Prov						
18. Percentage of full cost of test provision recovered by test		50%		60% (NT)	Unknown	Unknow	Unknown	Unknown	60% (NT)	
fee?		(ACT, 9)		75%(Qld)	(NSW)	n (NSW)	(NSW)	(NSW)	100%(SA)	
		Unknown		20%(Tas)	60% (NT)	60%	60% (NT)		20%(Tas)	
		(NSW)		100%	75%(Qld)	(NT)	75%(Qld)	75%(Qld)	Vic(16)	
		60%		(WA)	100%(SA	75%	100%(SA)	100%(SA		
		(NT))	(Qld)	20%(Tas))		
		100%			20%(Tas)	100%	Vic(16)	20%(Tas)		
		75%			Vic(16)	(SA)	100%	Vic(16)		
		(Qld)	1			20%(Tas	(WA)	100%(W		
		(SA, 9))		A)		
		20%				Vic(16)	1			
		(Tas)								
		100%					, i			
		Vic, WA]					

ACT

8: full cost recovery where tests provided within CBTA system9: most tests completed as part of outsourced operations, fees relate only to minority of tests conducted by SA Transport SA

Tas

12: developed in conjunction with Stay Upright 13: for learners, includes cost of training course - lower prices where own motorcycle provided by candidate

16: provider's fees include test costs - these are determined by market forces Vic

14: fee incorporated into licence application fee of \$46.30 WA

	Type/Class of Licence											
Driver Licensing Requirements, Assessment and		Car	Moto	rcycle			Heavy Ve	ehicle				
Performance Standards .	Learner	Prob /Prov	Learner	Prob /Prov	LR	MR	HR	HC	MC			
On Road Practical Tests							······					
19. What training aids &/or courses for candidates are available to support this test?												
a. test manual/handbook for applicants (please indicate cost: \$)		\$0(ACT, NSW, NT, Tas, WA) \$4 (Qld) \$2.00 (SA, 10)	SO (Tas)	\$4(Qld,15) \$0(Tas)	NT, Tas)	(NSW, NT, Tas) \$4 (Qld,15) \$2.00	\$0 (NSW Tas) \$4(Qld,15) \$2.00 (SA)	Tas) \$4(Qld,15				
 b. audio tape based on manual/handbook (please indicate cost: \$) c. Web site based on manual/handbook (please supply details of location/cost) 		\$8.0 (NSW) ACT, NSW, WA			\$8.0 (NSW) NSW	(SA) \$8.0 (NSW) NSW	\$8.0 (NSW) NSW	\$8.0 (NSW) NSW				
d. Commercial training (e.g. driving schools/ instructors)(please supply details of availability/cost)			\$65 course (NT) Qld	Qld,	NT (19) Qld SA (11) Vic(17)	NSW NT (19) Qld SA(11) Vic(17)	NSW NT (19) Qld SA(11) Vic(17) WA(15)	NSW NT (19) Qld SA(11) Vic(17) WA(15)	NT (19) Qld, SA(11), Vic(17)			
e. TAFE training programs (please supply details of availability/cost) f. Industry training programs (e.g. within transport industry sector)(please supply details of availability/cost)					Vic(17) NSW, Qld \$600 - \$1200 (Tas)	Vic(17) NSW, Qld \$600 - \$1200 (Tas)		Vic(17) NSW, Qld \$600 \$1200 (Tas)	Vic(17) Qld \$600 -\$1200 - (Tas)			

	Type/Class of Licence										
Driver Licensing Requirements, Assessment and	Car		Motorcycle		Heavy Vehicle						
Performance Standards											
	Learner	Prob	Learner	Prob	LR	MR	HR	HC	MC		
		/Prov		/Prov							
g. Programs provided by the licensing jurisdiction (please supply			NT (20)	NT (20)			SA (12)	SA(12)	SA (12)		
details of availability/cost)											
h. Programs provided by private contractors on behalf of			\$180	\$160-\$220							
licensing authority (please supply details of availability/cost)		1	(Tas)	(Tas)							
i. Other (please provide details, mcluding costs)	Q1d(16)										
Notes:									Contraction of the state of well-well-well-state to the state of the state		

 NT
 18: Car driving school lesson costs range from \$35-40 per hour

 19: Training costs for heavy vehicle licence ranges from \$300-\$650

 20: Motorcycle Education, Training and Licensing (METAL) programs provided every weekend in Darwin and Alice Springs

Qld15: Same handbook for all licence classes16: guide for learners drivers titled, "Ready to go" is issued free with learner permitSA10: Road Traffic Code \$2.00, Driving Companion is free

- 11: \$70-200 per hour for heavy vehicle categories 12: Rates about \$80 per hour
- Vic 17: market forces determine training fees these are not set or controlled by VicRoads

WA 15: market forces determine training fees - heavy vehicle training/assessment will be outsourced when national heavy vehicle categories are adopted

		Type/class of licence										
Driver Licensing Requirements, Assessment and		Car	Moto	rcycle	Heavy Vehicle							
Performance Standards						1						
	Learner	Prob	Learner	Prob/Prov	LR	MR	HR	HC	MC			
		/Prov	_	_								
On Road Practical Tests		-				- <u></u>						
20. Have any of these training aids, courses or programs ever been formally evaluated to determine their educational												
and/or road safety effects?												
a. No, never	an a	NSW.NT.	Tas	INT. Old.	NSW NT.	NSW	NSW, NT.	NSW	NT, SA, Tas			
		Qld,			QId, SA			NT, Qld,				
		SA, Tas. Vic, WA				Qld,	Tas, Vic.					
						SA, Tas		Tas, Vic.	19			
						Vic		WA				
b. Yes, in 19		1998	1998		1998	1998	1998	1998	1998			
		(ACT)	(ACT)		(ACT)	(ACT)	(ACT)	(ACT)	(ACT)			
21. Does this test form part of a Graduated licensing System?		(9)										
a. Yes		NSW	Tas	Qld, Tas	NSW	NSW	NSW	NSW	NT(21), SA,			
		SA, Qld			NT(21),	NT(21)	NT(21),	NT(21),	Tas, Vic			
		Tas, Vic			Qld, SA	Qld, SA		Qld, SA,				
					Vic	Tas, Vic		Tas, Vic				
							Vie					
b. No		ACT, WA	ACT	WA	ACT	ACT	ACT, WA	ACT, WA	ACT			
22. Is this test linked to a Competency Based Training &												
Assessment System a. Yes		ACT (10)	ACT, Tas	Tas	ACT	ACT	ACT	ACT	ACT			
d. 115		SA SA	AC1, 145		NSW(10)	NSW	NSW	NSW(10	NSW(10			
					SA	(10)	(10)	SA	115 11(10			
						SA	SA					
b. No		ACT,		Qld, WA	NT, Qld,				NT, Tas, Vic			
		NSW			Tas, Vic	Qld, Tas,		Tas, Vic,				
		NT, Qld				Vic	WA	WA				
		Tas, Vic, WA	1	1	1	1	1	1	1			
23. Are some candidates exempted from this test?		1	l	1			1	1				

	Type/class of licence											
Driver Licensing Requirements, Assessment and Performance Standards		Car	Moto	Motorcycle		Heavy Vehicle						
	Learner	Prob /Prov	Learner	Prob/Prov	LR	MR	HR	HC	МС			
a. Yes (, e.g. people in remote areas, people who have completed approved training)		NT(22) Qld(17) SA(13) Tas (14)	Tas (14)	QId(17) Tas (14)	Qld(17) SA(13)	Qld(17) SA(13)	NT(22) Qld(17) SA(13) Tas (14)		NT(22), Tas (14)			
o. No		ACT, NSW Vic, WA		WA	Contraction of the second second second	ACT	ACT		ACT, Vic			
24. Are requirements for the administration and scoring of he test set out in a standardised testing manual?												
ı. Yes		ACT (10) NSW, NT(23) Qld, SA, Vic WA	Tas	WA	NT (23) QId,, SA,		NSW, Qld, SA, Vic, WA		SA, Vic			
o. No		ACT, Tas	ACT	NT	1	ACT, Tas	ACT,NT Tas	ACT, NT Tas	ACT, NT, Tas			

ACT 9: no reports available

10: CBTA option

10: CBTA optional for heavy vehicle licence classes NSW

21: as per National Licence Class Guidelines NT 22: where approved training has been completed 23: VORT Manual

Qld 17: where candidate's previous licence was issued less than five years before expiry

SA 13: where CBTA approach is taken

14: for motorcyclists, where previous satisfactory riding experience can be demonstrated; for heavy vehicle applicants, where accredited training has been completed Tas

	Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance Standards		Car	Motorcycle		Heavy Vehicle							
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC			
On Road Practical Tests		* *********		-		-	·····					
25. Are the test and its administrators subject to auditing?			·		******	• • • • • • • • • • • • • • • • • • •	·		· ····································			
a. Yes		ACT NSW NT(24) Qld, SA, Vic, WA	ACT, Tas	Qld Tas, WA	ACT,NS W NT(24), Qld, SA, Vic	NSW NT(24),	NSW NT(24), Qld		ACT., NT(24) SA, Vic			
b. No		Tas			Tas	Tas	Tas	Tas	Tas			
26. Are commercial driving instructor fees regulated in the jurisdiction	-		ACT	ACT								
a. Yes b. No		ACT, NSW NT, Qld,	NT, Tas			NSW	NSW	ACT, NSW, NT, Qld	ACT, NT,SA, Tas, Vic			
		SA, Tas, Vic, WA				SA, Tas, Vic	SA, Tas	SA,, Tas, Vic, WA				

NT 24: random internal auditing

				Type/Cl	lass of Lice	ence					
Driver Licensing Requirements, Assessment and Performance Standards	C	Car		Motorcycle		Heavy Vehicle					
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC		
Off Road Practical Tests											
1. What is the scoring format of the off-road test?						1					
a. error checking/point deduction		ant Roberts	SA, Vic	NSW, SA Vic							
b. objective, competency based (i.e. Yes/No categories)			NT (25), Tas	NSW, Tas							
c. Other		Qld (18) WA (16)	Qld (18) WA (16)				QId (18) WA (16)		WA (16)		
2. How is the candidate's test performance recorded?											
a. On a standardised, printed score sheet			NT , SA, Tas, Vic	NSW, SA, Vic							
b. On a standardised computerised proforma									**************************************		
c. In another manner				Tas			2				
3. Does the test use standard test components?											
a. Yes			NT, Tas, Vic	Vic							
b. No											
c. Other (please give details)			SA (14)	Tas NSW							

NT 25: Alternate MOST used

SA

14: Ridersafe standard components all completed in one area
18: no off-road assessment conducted in Qld for any licence class
16: no off-road assessment conducted in WA for any licence class Qld WA

	Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance Standards in (please provide name of state or territory)	Car		Motorcycle		Heavy Vehicle							
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC			
Off Road Practical Tests		Ī										
4. During the test, where is the testing officer positioned? a. Outside vehicle		s. Providente l'un Maria	NT, SA, Tas, Vic	Tas, Vic	a shine setting on a stranger	and the standard second second			• ************************************			
b. Other			NSW									
5. How many assessable items are covered in the test?			7 (NSW, NT) 4 (SA) 18 (Tas) 4 (Vic)	8 (Tas) 2 (Vic, 18)								
6. What is the overall duration of the test in minutes?			10 (NSW) 15 (NT) SA(15) Tas (15) 10-15 (Vic)	60 (Tas) <20(Vic)								
7. What score (%) must be achieved to pass?			NSW(11) NT (26) SA(16) Vic(19)	80% (Vic)								
8. Which of the following would lead to an immediate/outright failure of the test?												
a. Failure to follow instructions			NSW,NT Tas, Vic	Tas, Vic								
b. Failure of low speed, parking or maneuvering components	nenne - en en de la d		NT, Tas, Vic	Tas,								
c. performing an unsafe action			NT, Vic	Tas, Vic								
d. Other			NT (27) SA (18)					and a second constrained by the				

NSW 11: MOST requires loss of <8 points to achieve a pass

26: No percentage awarded - when errors exceed 10 points test is terminated NT 27: falling off motorcycle

15: no set time, as long as it takes 16: Loss of <10 points SA

17: loss of <20 points

18: points fail only

Tas Vic

15: assessment integrated into 8.5 hour training course

18: 2 main exercises (Turning speed judgement and responding to hazards) with sub tasks within them 19: loss of <10 points

Page A.	29
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	Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance Standards	Car		Motorcy	vcle	Í	Hea	vy Vehicle					
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC			
Off Road Practical Tests					······				-			
9. What is the content of the test? a. safe driving practices/road craft (please give % of total test)			SA, Tas, Vic	Tas, Vic								
b. vehicle control skills (please give % of total test)			100% (NT) SA, Tas, Vic	Tas, Vic								
c. low speed manoeuvring (e.g. parking, reversing) (please give % of total test) d. Other (please give details and % of total test)			SA, Tas, Vic NSW	Tas								
10. Must candidates pass all individual sections of the test or is pass/fail based on total score?												
a. Yes b. No		20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	NT, Vic NSW, SA	Vic								
11. When was the current test first introduced?			90 (NSW) 93(NT) 87 (SA) 98 (Tas) 83 (Vic)	98(Tas), 85 (Vic)								
12. When was the test last revised?			1995(NSW) 1993 (NT) 94 (SA) 98 (Tas) 93 (Vic)	98(Tas) 93 (Vic)								
13. Has the test ever been formally evaluated to determine its validity &/or												
reliability as a testing instrument or road safety effects												
a. No, never			NSW, NT (28), Tas, Vic (20)	Tas, Vic(20)								
b. Yes, in 19			SA (date unknown)				and the second secon					

NT Vic

28: based on MOST, which was extensively evaluated in USA20: based on MOST, MLST models developed and evaluated by MSF(USA) in 1970s and 1980s

	Type/Class of Licence											
Driver Licensing Requirements, Assessment and Performance Standards	Car		Motorcycle		Heavy Vehicle							
	Learner	Prob /Prov	Learner	Prob/ Prov	LR	MR	HR	HC	МС			
Off Road Practical Tests							•					
14. The test was developed as follows:					· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	- <u></u>	-				
a. "In house" by licence testing staff			Tas(16)	Tas(16)								
b. "In house" by specialist test developers			Vic (20)	Vic(20)								
c. Externally by professional test developers			NT									
d. Other (please supply details)			NSW (12) SA(19)									
15. What fee is charged for this test?			\$32 (NSW) \$0(NT) \$73.00 (SA) \$180(Tas,17) Vic(21)	\$160-220 (Tas,17) Vic (21)								
16. Does this fee cover/recover the full cost of test provision?			· · · · · · · · · · · · · · · · · · ·									
a. Yes			NSW									
b. No, covers% only (please write/type the % in each column as			0% (NT)									
appropriate) c. Unknown			Unknown (SA, Tas, Vic)	Unknown (Vic)								

NSW

SA

12: test (MOST) developed by MSF in USA
19: by in-house road safety officers
16: Developed in consultation with external training provider
17: training course cost, tests are incorporated into training
21: training providers set own fees, test charges are included with these Tas

Vic

	Type/Class of Licence									
Driver Licensing Requirements, Assessment and Performance Standards	ds Car		Motorcycle		Heavy Vehicle					
	Learner	Prob /Prov	Learner	Prob/Prov	LR	MR	HR	НС	MC	
Off Road Practical Tests										
17. What training aids &/or courses for candidates are available to support this test?										
a. test manual/handbook for applicants (please indicate cost: \$)				\$0 (NSW)						
b. Programs provided by private contractors on behalf of the licensing authority (please supply details of availability/cost)			\$52 (NSW) Tas	\$78 (NSW) (13) Tas						
c. Other (please provide details, including costs)			SA (20) Vic(22)	, Vic(22)						

Notes: NSW

13: plus \$32 MOST fee20: training aids form part of Ridersafe courses22: fact sheets on each test SA Vic

	Type/Class of Licence									
Driver Licensing Requirements, Assessment and Performance Standards	Car		Motorcycle		Heavy Vehicle					
	Learner	Prob/ Prov	Learner	Prob/ Prov	LR	MR	HR	HC	MC	
Off Road Practical Tests		1	·							
18. Have any of these training aids, courses or programs ever been formally evaluated to determine their educational and/or road safety effects?										
a. No, never b. Yes, in 19			NT, Tas, Vic NSW, SA (21)	Tas, Vic NSW						
19. Does this test form part of a Graduated Licensing system?										
a. Yes			NSW, NT, Tas, Vic	NSW, Tas, Vic						
b. No		or a second s	SA, Vic	Vic						
20. Is this test linked to a Competency Based Training & Assessment System?										
a. Yes		1000	NSW, Tas	NSW						
b. No			NT, SA	Tas						
21. Are some candidates exempted from this test?										
a. Yes		1. Assessed	NSW (14) NT (29) SA (22) Tas (18)	NSW (14)						
b. No			Vic	Tas, Vic				T		

NSW 14: applicants who do not live in declared areas (about 10% of state is exempted)

NT, 29: exemptions where approved training completed or applicants in remote areas

SA

21: evaluation completed, results not available
22: applicants who live in remote areas do not have to do the Ridersafe course – less than 10% of applicants
18: Those assessed as having sufficient riding experience/history

Tas

	Type/Class of Licence									
Driver Licensing Requirements, Assessment and Performance	Car		Motorcycle		Heavy Vehicle					
Standards				•				-		
	Learner	Prob	Learner	Prob/	LR	MR	HR	HC	MC	
		/Prov		Prov						
Off Road Practical Tests										
22. Are requirements for the administration and scoring of the test set				·						
out in a standardised testing manual?										
a. Yes (please give details)			and the second se	NSW, Vic				1.1.1		
			NT(MOST)	10,000			1	4		
	1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		SA, Tas, Vic							
23. Are the test and its administrators subject to auditing?										
a. Yes (please give details)			NSW, NT(30)				and the second second			
			SA Tas, Vic	Vic						
24. Any other information or comments? (please type or write these			Tas (19)	Tas (19)						
below)										

NT Tas 30: in-house auditing by senior staff 19: motorcycle manuals are subject to copyright – property of Stay Upright Inc

PRINCIPLES OF ROAD TRANSPORT REFORM

The NRTC's principles of reform are grouped under four core objectives:

OBJECTIVE: IMPROVE ROAD TRANSPORT EFFICIENCY

- improving the productivity of heavy vehicle operations
- implementing nationally uniform or consistent regimes
- encouraging innovation and technological advancement
- encouraging international harmonisation of vehicle standards
- ensuring road user charges recover a fair share of costs from heavy vehicle users.

OBJECTIVE: IMPROVE ROAD SAFETY

- encouraging the development of safer vehicles
- introducing safer road environments and road user behaviours
- improving the effectiveness and efficiency of compliance with road transport laws
- facilitating the development of innovative and quality assurance-based approaches to improving the safe operation of vehicles.

OBJECTIVE: REDUCE THE ENVIRONMENTAL IMPACT OF ROAD TRANSPORT

- ensuring Australian vehicles meet world's best practice standards (at construction and in-service)
- adopting the principle of environmental sustainability in developing policy.

OBJECTIVE: REDUCE THE COSTS OF ADMINISTRATION OF ROAD TRANSPORT

• introducing simpler, more cost-effective national regulatory regimes and other arrangements which impact on transport agencies and road users.



NATIONAL ROAD TRANSPORT COMMISSION

DELIVERING AUSTRALIAN ROAD TRANSPORT REFORM

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