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Department of Infrastructure

National Competition Policy review of Taxi-cab and Small Commercial Passenger Vehicle Legislation

KPMG Consulting
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Appendices contain 12 pages
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Executive Summary

This review was commissioned by the (Victorian) Minister for Roads and Ports to examine the case for reform of legislative restrictions on competition contained in the *Transport Act 1983* – Part 6 Division 5 (Commercial Passenger Vehicles), the *Transport (Taxi-cab) Regulations 1994* and the *Transport (Passenger Vehicles) Regulations 1994*. The review was in response to the requirements of National Competition Policy.

In line with the provisions of the Competition Principles Agreement, signed by the Premier and other Australian government leaders in April 1995, the review has considered the objectives of the small commercial passenger vehicle (SCPV) legislation, the restrictions on competition contained in the legislation, the benefits and costs of these restrictions and alternative, more efficient, ways to achieve the objectives.

A Steering Committee, chaired by Rob McQuillen, oversaw the review. Other members of the Steering Committee were Jennifer Fraser (Department of Premier and Cabinet), Robert Wright (Department of Treasury and Finance), and Lawrie Tooher (Department of Infrastructure).

The Steering Committee appointed KPMG Consulting to assist it in conducting the review. The consultants were David Cousins and Warwick Davis. Ian Radbone from the University of South Australia also commented on a draft of this report. The review was advertised widely in the State. A Discussion Paper was issued to assist public consultation. Consultations with key stakeholders were held and written submissions received. KPMG prepared both a Draft Report and Final Report. These were commented on by the Steering Committee. The views expressed in this Final Report are, however, those of KPMG and are not necessarily all shared equally by the Steering Committee.

The Report provides a summary of the legislation and the background to it. The legislation is considered to have the following objectives:

- to minimise safety risks to passengers and drivers;
- to prevent monopoly pricing and consumer exploitation (consumer protection); and
- to promote a positive image for the tourism industry.

There is also evidence to suggest that a further equity related objective is to ensure that all consumers are able to obtain access to passenger transport services.

The legislation addresses market failures in relation to the asymmetry of information between operators of SCPVs and their passengers, and problems of monopoly power in relation to taxi-cabs.

The markets identified were categorised as the 'cruising' and 'rank' passenger transport markets (cruising market) in which taxi-cabs currently operate, and 'pre-booked' markets in which hire cars and other SCPVs also operate. Markets were considered to be regional in nature.

The Report separates the restrictions on competition into four categories:

- 'public interest' limitations on entry of SCPVs (including taxi-cabs);
- inter-modal restrictions affecting competition between SCPVs and public transport, and between various categories of SCPV;
- price restrictions affecting taxi-cabs; and
- quality controls, which affect all classes of SCPV.

The review concluded that, on balance, the public interest restrictions on entry and many of the inter-modal restrictions do not provide net benefits to the community. The regulation of fares was seen as currently delivering net costs, although potentially there is a case for fare regulation to provide net benefits. Most of the existing quality controls were seen to provide net benefits.

The Report briefly examines interstate and overseas experience with reform of the SCPV sector.

We examined four regulatory options or models (in addition to the current system) for consideration in Victoria. These are characterised as follows:

- Removal of all industry-specific legislation;
- Removal of public interest entry regulation and fare regulation;
- Removal of public interest entry regulation; and
- Partial removal of public interest entry regulation.

Policy recommendations put forward for consideration by Government include:

- removal of public interest entry restrictions on all forms of SCPV, while maintaining current quality controls;
- a move of taxi-cab fare-setting powers to depots, who would have their fares assessed for reasonableness by an independent party (such as the Office of the Regulator-General);
- a relaxation of requirements necessary to become an 'approved depot';

- a removal of taxi-cab zoning (including the Outer-suburban zone);
- a removal of the prohibition on route services where public transport service is not operating, or where the service is provided under a public transport contract; and
- an alignment of vehicle quality controls between hire cars and taxi-cabs; and
- establishment of a standard set of licence conditions for operation in cruising and pre-booked markets.

Overview of conclusions and recommendations

The Victorian small commercial passenger vehicle industry (incorporating taxi-cabs, hire cars, restricted hire vehicles and special purpose vehicles) is characterised by high levels of regulation on entry, quality and price. The purpose of this review has been to determine whether the costs of this regulation outweigh the benefits, and whether the objectives of the regulation could be achieved in less restrictive, more efficient ways.

The performance of the taxi industry has been characterised by spiralling licence values (from $26,800 in 1981 to over $260,000 in 1998 in nominal terms) and an inability to service peak demands. These high licence values are symptomatic of the high profits that continue to be made by owners of licences. The quality of the service provided otherwise has been perceived as good, with recent reforms on vehicle and driver (including vehicle livery) being well accepted by consumers and taxi operators.

Hire cars, restricted hire and special purpose vehicles are other categories of small commercial passenger vehicle licensed to operate in Victoria. The restrictions on taxi licences have resulted in regulations designed to ensure that these other categories of vehicle do not compete with taxi-cabs (such as vehicle standards), or even among themselves (in licence conditions which restrict the type of work they can do).

Fundamentally, we see there are two major markets for SCPVs; a 'cruising' market in which vehicles ply for hire or stand at ranks for custom, and a 'pre-booked' market in which services are ordered prior to the journey by phone. The risks associated with operation in these markets are different and they should be regulated differently.

Our analysis of costs and benefits has shown that regulation imposes significant costs on consumers with the beneficiaries of this regulation being those who have purchased licences to operate at lower than their capitalised value. Consumers pay more for taxi services and subsequently consume fewer of these than is preferable. Specifically in the Melbourne and Outer suburban areas, we estimated that the costs of public interest and fare restrictions on taxi-cabs to be $72 million per year. Consumers pay almost $3 more on an average taxi fare than would be the case where there were no public interest restrictions on entry. Consumers also lose from longer waiting times than necessary (particularly at peak times), and restrictions on the types of service available.

Table E1 Annual costs and benefits of restricted entry in Greater Melbourne (taxi-cabs only)

Consumers	lose	$72.1 million
Licence owners	gain	$66.1 million
Society	loses	$6 million (value of lost trips)

Extending this across the whole of Victoria, and incorporating the costs associated with restricted entry into hire cars we could estimate that the total cost to consumers could exceed $85 million per year, and the value of lost trips $7 million per year. These estimates are considered to be conservative. The restrictions also have negative equity impacts, as evidence suggests that lower-income groups spend more as a percentage of their income on taxi fares than do higher-income groups.

We found that there are few public benefits (other than higher profits accruing to licence owners) resulting from public interest restrictions on entry. The Victorian Taxi Association submission focused on the problems associated with deregulation in other countries, but did not provide significant evidence on the benefits generated by existing regulations. There is simply no compelling case to restrict entry into the cruising or pre-booked market (incorporating all vehicles) by limiting the availability of licences on 'public interest' grounds.

While there has been a case made before for the deregulation of taxi fares (Trade Practices Commission (1993) and Industry Commission (1994)), we consider that there are short-term obstacles to effective fare competition. Until effective competition can be introduced, the regulation of fares charged by operators in cruising markets (taxi-cabs) can have benefits that outweigh costs. We argue that fare regulation is currently problematic and has contributed to the high costs of public interest restrictions on entry. Consumers need to be protected from opportunistic exploitation and fare controls can provide this. We consider that allowing depots to post prices which must be assessed for reasonableness by an independent regulator (we suggest the Office of the Regulation General) provides for flexibility while ensuring consumers are not exploited. In the long term, as effective competition is introduced, these requirements can be removed. This is a less restrictive alternative to existing regulation that will continue to meet the objectives of the legislation.

Quality controls, such as driver and vehicle minimum standards, remain essential in cruising and pre-booked markets. We note that the 'problems' quoted by opponents of open entry mostly relate to either lax quality controls (as in London 'mini-cabs' and the United States) or lax enforcement of quality controls.

We consider the best approach to removing unnecessary restrictions on competition is to compensate existing licence owners, and recover these costs by issuing annual licences at a price commensurate with existing assignment values. Under this scheme, consumers will not benefit immediately, but once the compensation has been fully paid for, there will be significant room for fares to fall. Currently with licence assignment values at close to $20,000 per year, taxi operators must recover almost 5 'average' fares per day (1700 per year) before other costs of vehicle operation and driver remuneration can begin to be recovered. In addition, our analysis suggests that lower prices would result in more taxi travel (in the order of 18% more trips), and could expand employment opportunities by 1,000-1,300 persons given an existing employment level of 6,500-9,000 drivers. As relatively lower-skilled jobs, these employment opportunities might be considered particularly important.

The conclusions and recommendations are further discussed in section 12 of the Report.

1 Introduction

1.1 National Competition Policy process

National Competition Policy represents a commitment by Australian governments to a consistent national approach to fostering greater economic efficiency, and improving the overall competitiveness of the economy, with a view to achieving higher rates of economic and employment growth.

National Competition Policy was given effect to by a number of agreements signed by Commonwealth and State/Territory leaders in April 1995. One element of the Competition Principles Agreement was the establishment of a process to review and reform all legislation that restricted competition by the year 2000. This review process covers existing and new legislation. In Victoria, this entailed the review of some 400 pieces of existing legislation, including the Transport Act and Regulations.

The guiding legislative principle in the Competition Principles Agreement is that:

legislation should not restrict competition unless it can be demonstrated that:

(a) the benefits of the restriction to the community as a whole outweigh the costs; and

(b) the objectives of the legislation can only be achieved by restricting competition.

The Competition Principles Agreement requires that legislation reviews should:

1. Clarify the objectives of the legislation.

2. Identify the nature of the restriction on competition.

3. Analyse the likely effect of the restriction on competition and on the economy generally.

4. Assess and balance the costs and benefits of the restriction.

5. Consider alternative means for achieving the same results including non-legislative approaches.

The Victorian Government has developed a detailed set of Guidelines[1] to assist those undertaking NCP legislative reviews. These Guidelines were followed in undertaking this review. These Guidelines note that there must be a presumption against statutory intervention and the onus should be on the proponent of intervention.

[1] Department of Premier and Cabinet, *Guidelines – Review of Legislative Restrictions on Competition, November 1996.*

The focus on reviewing legislative, or public, restrictions on competition is complementary to the wider application of the *Trade Practices Act 1974* to cover all business irrespective of the nature of ownership and organisational form that was also implemented as part of National Competition Policy. The *Trade Practices Act* covers private restrictions on competition.

1.2 Terms of reference

The review has been commissioned by the Victorian Minister for Roads and Ports to examine the case for reform of legislative restrictions on competition contained in the:

- *Transport Act 1983* (Transport Act) – Part 6 Division 5 (Commercial Passenger Vehicles);
- *Transport (Taxi-cab) Regulations 1994*; and
- *Transport (Passenger Vehicles) Regulations 1994;*

as they relate to taxi-cabs, hire cars and other small commercial passenger vehicles (SCPVs) with a seating capacity of up to 12 passengers (including the driver).

The review was conducted in accordance with the Model 2 process (semi-public review) outlined in the Victorian Government's Guidelines for the Review of Legislative Restrictions on Competition. In particular, the review was required to document and develop evidence and findings which:

- clarify the objectives of the Transport Act and related regulations in the context of the small commercial passenger service industry;
- identify the nature of restrictions on competition contained in the Act and regulations which relate to small commercial passenger vehicles;
- analyse the likely effect of the restrictions on competition on the small commercial passenger service industry and the economy in general;
- assess and balance the costs and benefits of the restrictions in the context of the objectives of the legislation;
- identify and assess alternative means of achieving the objectives of the legislation, including non-legislative means; and
- support recommendations to be provided in its final report regarding reforms to the current legislation, including where appropriate, alternative non-legislative means of achieving the objectives of the legislation.

The review is one of a series of reviews of components of the *Transport Act 1983*. (This review was conducted concurrently with a review of towing regulation.) Though commissioned separately, the Government will need to maintain consistent policy across the sector. To assist the Government, the review was required, in addition to following the Guidelines, to take into account the work and findings of the competition policy review of legislative restrictions applying to large commercial passenger vehicles (ie. vehicles with a seating capacity of 13 or more people), commissioned by the Minister for Transport, which was expected to be completed during the course of the current review. To the extent possible, the findings and recommendations of the two reviews were to be compatible in the context of the broader commercial passenger service industry.

The review was also required to take into account the interdependence of the different segments within the small commercial passenger service market (ie. taxi-cabs, hire cars, special purpose vehicles (SPVs) and restricted hire vehicles (RHVs)) and ensure that any proposals arising from the review were designed to produce integrated outcomes for the sector.

In examining options for reform the review took into account the role of taxi-cabs in providing safe and efficient transport to the public and other consumers.

1.3 The conduct of the review

The review commenced in January 1999 with the preparation of a discussion paper. The availability of this paper was advertised and submissions to the review requested. In all, 49 submissions were received from a wide range of sources, with the majority from industry participants including:

- Victorian Taxi Association (VTA);
- Hire Car Association of Victoria;
- Special purpose vehicle Sector;
- Taxi Industry Council of Australia;
- Victorian Taxi Driver's Association;
- Geelong and Districts Taxi and Hire-Car Drivers' Association;
- Transport Workers' Union;
- Victorian Taxi Owners Group;
- Taxi-cab operators;

- Owner-drivers; and
- Accessible Transport Consultative Committee.

A full list of submissions is provided in Appendix A.

Consultation with the major industry bodies was undertaken in January and February 1999. This included representation from licence owners and depots, taxi-cab drivers and disabled groups.

The report was prepared based on submissions, consultations and desk research and took account of comments by the Steering Committee.

1.4 Outline of the report

Section 2 looks at the Victorian taxi-cab, hire car and other small commercial passenger vehicle (SCPV) industry. It provides broad background on the industry structure and looks at basic demand characteristics.

Section 3 looks at the regulatory framework and restrictions on competition. It identifies relevant markets for analysis.

Section 4 examines the effect of the identified restrictions on competition on SCPV industry performance.

Section 5 identifies the objectives of the Transport Act in relation to taxi-cabs, hire cars and other SCPVs, and identifies relevant market failures.

Section 6 examines the effect of restrictions on entry into various markets, including through restrictions on the numbers of licensed taxi-cabs and hire cars, and zoning provisions.

Section 7 looks at restrictions on inter-modal competition – that is, restrictions that prevent competition between taxi-cabs, hire cars, other small commercial passengers vehicles and other public transport such as trains, trams and buses.

Section 8 analyses fare regulation in the taxi-cab industry as a restriction on competition.

Section 9 looks at restrictions on the 'quality of service' provided by taxi-cabs and hire cars.

Section 10 identifies reform options, including a review of passenger vehicle regulation overseas, and looks at different models of regulation.

Section 11 examines other issues that were raised during the review process.

Section 12 explains the conclusions and recommendations of the review.

Appendix A contains a list of submissions to the review.

Appendix B contains a summary of the *Transport (Taxi-cab) Regulations 1994.*

Appendix C provides further detail on the modelling of efficiency losses from taxi licensing in Greater Melbourne.

Appendix D provides the references used in the report.

1.5 Disclaimer

In accordance with our company policy, we are obliged to advise that neither KPMG nor any member nor employee undertakes responsibility in any way to any organisation other than the Department of Infrastructure in respect of information set out in this report, including any errors or omissions arising through negligence or other cause.

2 The Victorian taxi-cab, hire car and other small commercial passenger vehicle industry

2.1 Nature of the industry

2.1.1 Supply of small commercial passenger vehicles

A commercial passenger vehicle is defined in the Transport Act as "any motor vehicle...which is used or intended to be used for carrying passengers for hire or reward."[2] This definition does not include public commercial passenger vehicles, which are operated by the Public Transport Corporation (or privatised components), or other approved route service. An SCPV is a vehicle with a seating capacity of 12 or fewer.

The Transport Act establishes several main categories of SCPVs:

1. **Taxi-cabs,** which are available for hire from a taxi-cab rank or by hailing in the street or by booking through a taxi-cab depot.

2. **Private Hire Cars,** which are large modern luxurious sedans or stretched limousines. They can only operate after being previously booked from the place of business of the owner. Private hire cars do not have meters and charges are negotiated with the customer. A hire car cannot accept hirings off the street.

3. **Restricted Hire Vehicles (RHVs)** are similar to Private Hire Cars except that only limited types of vehicles qualify for this licence type. These are:

   - classic/vintage/veteran cars made before January 1943;
   - vehicles which by the nature of their construction or equipment can provide a service that no other type of licensed vehicle can (eg. motorcycles, off-road four-wheel-drives, tourist buses); and
   - vehicles more than 25 years old as gazetted by the Minister for Roads & Ports (none are currently gazetted).

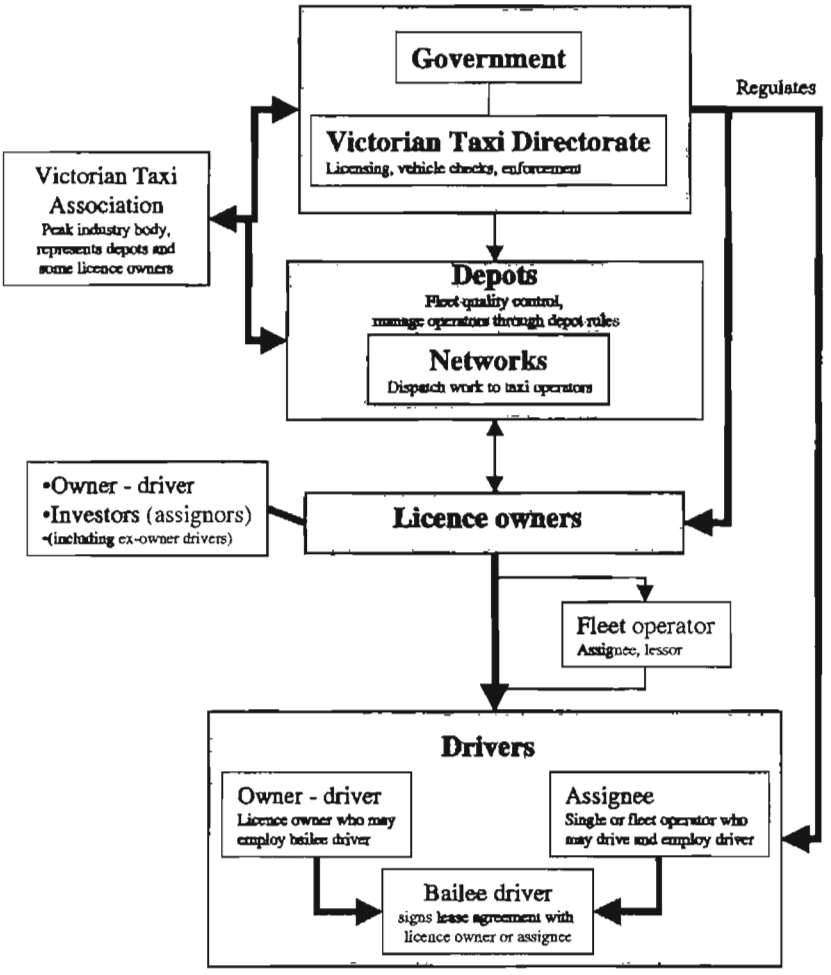
4. **Special Purpose Vehicles (SPVs)** are also similar to Private Hire Cars except they can only be licensed for specific purposes (eg. weddings, tourism activities).

[2] *Transport Act 1983*, p. 66.

2.1.1.1 Overview

Figure 2.1 provides a broad overview of the operation of the industry. It highlights the relationships between market participants, and provides an introduction to the following discussion of supply and demand of taxi-cabs and SCPVs.

Figure 2.1 The Victorian Taxi-cab Industry

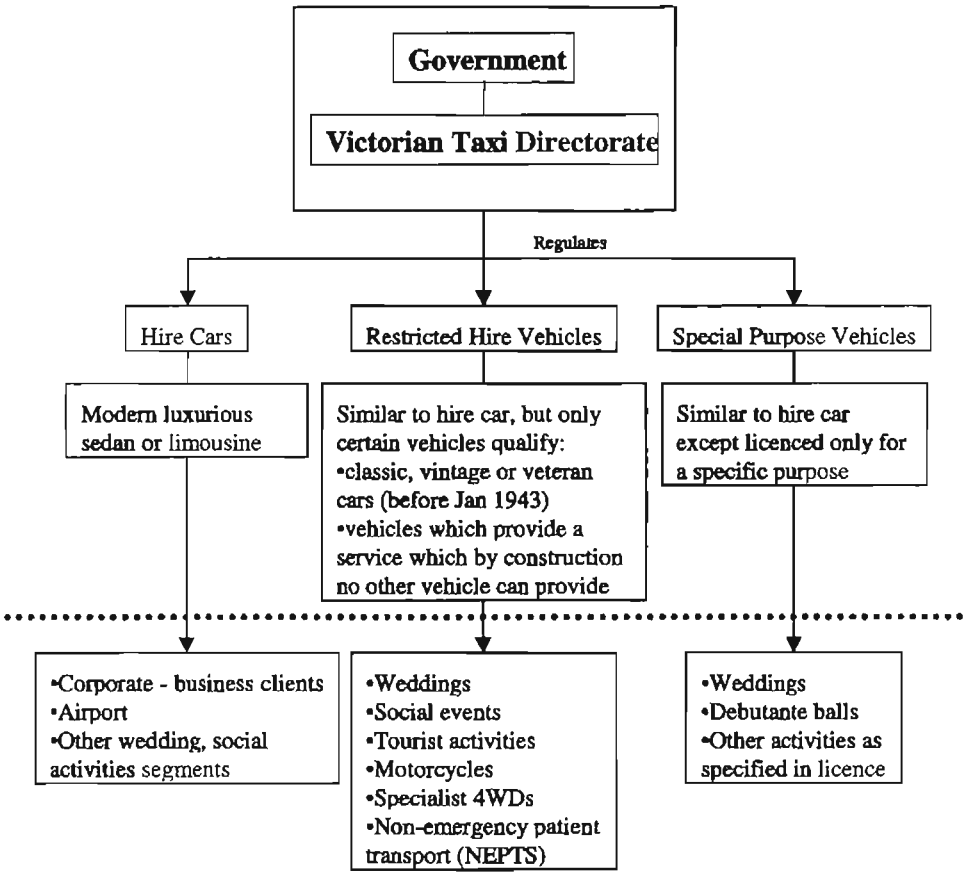


The Victorian Taxi Directorate, a branch of the Department of Infrastructure, regulates the industry. The Directorate is responsible for issuing drivers' certificates, depot approvals and overseeing the licence system. The VTA is the major peak body of the industry, representing depots and taxi-cab licence owners. Taxi-cab licence owners are required (as a licence condition) to join a depot. There are a considerable number of owner-drivers, fleet operators and assignees – who are the physical users of the licence. Assignment of licences allows investors to enter the industry. Taxi-cab drivers are the 'face' of the industry, and

may be either an owner-driver, an assignee of a licence or a bailee (lessee) of a licence assignee or owner.

Figure 2.2 highlights the other segments of the SCPV industry, including the category of licence and the type of service provided.

Figure 2.2 Other segments of the SCPV industry



2.1.1.2 Taxi-cabs

The total number of taxi-cabs in Victoria is limited by requirement for a licence issued under the Transport Act. Table 2.1 indicates the number and distribution of taxi-cab licences in Victoria at the beginning of 1999. The distribution of taxi-cabs between depots in the metropolitan area is shown in Table 2.2. At this level there is a relatively high degree of market concentration with the top four depots accounting for around 90 per cent of taxi-cabs. The largest depots are also large by international standards.

Table 2.1 Taxi-cab distribution in Victoria, 1999

Distribution of Taxi-cabs in Victoria, 4 January 1999			
Metropolitan taxi-cabs	3110	includes	70 wheelchair accessible taxi-cabs (WAT)
Outer suburban taxi-cabs (Frankston & Dandenong)	137	includes	14 WAT's
Ballarat	54	includes	3 WAT's
Bendigo	41	includes	3 WAT's
Geelong	143	includes	8 WAT's
Country taxi-cabs	413	includes	37 WAT's
Total	**3898**	**includes**	**135 WAT's**

Source: Victorian Taxi Directorate

Table 2.2 Taxi-cabs and depots, 1999

Number of Taxi-cabs at Metropolitan Depots, 4 January 1999		
Depots	**No. of Taxi-cabs**	
Silver Top Taxis	1411	
Black Cabs Combined	930	
Embassy Taxis	144	
Arrow Taxis	96	
North Suburban Taxis	274	
West Suburban Taxis	173	
Melbourne Combined Taxis	10	
Central Booking Service (CBS)	70	Wheelchair Accessible Taxis
* **Note**: a number of taxi-cabs attached to CBS are also authorised to operate through other metropolitan depots (listed above) for conventional hirings subject to CBS approval.		
Independent Operators	2	
Total	**3110**	

Source: Victorian Taxi Directorate

The Central Booking Service (CBS), which acts as a radio network for Melbourne's M50 (wheelchair accessible) taxi-cabs, was established by the Victorian Taxi Directorate and commenced operation in December 1996.

Data from the Victorian Taxi Directorate indicates that approximately 56 per cent (2166) of the licences on issue in Victoria as at 1 July 1997 were owned by single licence owners; 383 entities owned more than one licence but less than 5; 55 entities owned between 5 and 9 licences; 7 entities owned between 10 and 20 licences; 2 entities owned between 21 and 25 licences; 2 entities owned between 50 and 55 licences; and 1 entity owned 86 licences. Approximately 1800 entities held Melbourne's 3100 licences and approximately 1400 (45 per cent) of metropolitan taxi-cab licences were assigned to 900 entities.

2.1.1.3 Hire Cars

A hire car, as defined by the Transport Act, is a commercial passenger vehicle classified as a hire car by the Victorian Taxi Directorate. The Victorian Hire Car association noted the differences between a hire car and a taxi-cab:

> "Whereas a taxi-cab is 'bespoken' or available for hire from a taxi-cab rank, by hailing in the street, or by making a telephone booking, a hire car can *only* operate after it has been previously booked from the place of business of the owner. The other important distinction between a hire car and a taxi-cab is that taxi-cab fares are regulated by the Government and charged on a metered time-distance basis, whereas a hire car vehicle does not have a meter and the hire charge is negotiated when the booking is made. The operator of the hire car is unable to charge each passenger a separate fare."[3]

Table 2.1 indicates the number of licensed hire cars in Victoria between 1995 - 1998.

Table 2.1 Hire Car Licences, 1995 – 1998, Victoria

	Metropolitan	Country/Urban
1995	409	57
1996	426	59
1997	430	65
1998	442	66

Source: Victorian Taxi Directorate

[3] Submission of the Victorian Hire Car Association.

There are two sub-sectors within the hire car sector and they are defined according to the type of vehicle and the purpose or operation performed; these are "Restricted hire vehicles" and "Special purpose vehicles".

2.1.1.4 Restricted hire vehicles

A RHV is a commercial passenger vehicle that can provide a passenger service that no other licensed vehicle under the Transport Act is capable of providing. This may include vintage or veteran cars. Table 2.1 indicates the number of licensed RHVs in Victoria between 1995 – 1998.

Table 2.1 RHVs, 1995 – 1998, Victoria

Year	Licences
1995	546
1996	561
1997	500
1998	579

Source: Victorian Taxi Directorate

2.1.1.5 Special purpose vehicles

An SPV is a commercial passenger vehicle identified as such by the Victorian Taxi Directorate. It may include, for example, a right-hand drive motor vehicle or a vehicle for weddings or tourism activities. Table 2.1 indicates the number of licensed SPVs in Victoria between 1995 – 1998.

Table 2.1 SPVs, 1995 – 1998, Victoria

Year	Licences
1995	640
1996	776
1997	787
1998	895

Source: Victorian Taxi Directorate

2.1.1.6 Depots

Under licence conditions, taxi-cabs are required to operate through depots approved by the industry regulator, the Victorian Taxi Directorate. Historically, depots were established as co-operatives of individual licence owners. They are now evolving more conventional corporate structures, though many are still formally co-operatives. The depot may act as a booking agent for the receipt and dispatch of customer bookings to taxi-cabs operating under the depot radio or computer dispatch network. There is, however, a distinction between a depot and a computer booking or radio network – some depots have contracted out use of their networks to other depots. In Melbourne, Silver Top and Black Cabs operate large computer booking networks and they sub-contract these services to defray network costs.

Depots must be authorised by the Victorian Taxi Directorate. A depot will only be authorised if the applicant demonstrates that establishment of the depot will be in the public interest, that the guidelines for authorisation (discussed later) are complied with and that adequate financial and material backing for the depot exists.

Taxi-cab depots add an extra dimension to the market for taxi-cab services. A depot's major function is dispatching of telephone-booked hirings to drivers, but they also provide other services including garage services, driver training, voucher processing and management of licence transfers. Depots provide a focus for competition in the industry. They provide a degree of self-regulation over the industry as there is an incentive for them to maintain good reputations and brand awareness by ensuring members and drivers maintain minimum standards.

All depots have rules of membership. Membership of a depot involves payment of a monthly fee to the depot, and adherence to a set of depot rules and regulations. Depot fees vary across organisations, and licence owners are free to choose a depot that offers an optimum combination of depot fees and bookings (higher depot fees might imply, therefore, a higher number of bookings per taxi-cab). Table 2.1 looks at the changing number of cabs and depot fees for the major metropolitan and outer-suburban depots in 1999.

Table 2.1 Number of cabs and depot fees in the Metropolitan and surrounding areas

Depot	No. of Cabs (1986)	No of cabs (1995)	No of cabs (1999)	% change (1986-1999)	Depot fees $ per month (1995)
Arrow Taxis	148	170	79	-47%	180
Astoria Taxis	157	--	--	--	--
Black Cabs (Combined)	319	964	930	192%	260
Central Booking Service	--	--	70	--	--
Embassy Taxis	302	174	155	-49%	180
Melbourne Combined Taxis	n/a	21	10	-52%	200
North Suburban Taxis	254	268	316	24%	260
Regal Combined	757	--	--	--	--
Silver Top Taxis	821	1304	1467	79%	190
West Suburban Taxis	117	163	171	46%	260

Source: VTA Submission and Australian Trade Practices Reporter (1995), 50-209

Notes: (1) Black Cabs and Regal Combined merged to form Black Cabs Combined in 1993

(2) Silver Top and Astoria merged in 1993

The table shows that there is an increasing trend to concentration in depots. The Australian Competition and Consumer Competition rejected, in 1995, a proposed merger between Silver Top and North Suburban Taxis because of high industry concentration and high barriers to entry. However it also shows that depots can survive and even thrive where geographic recognition is strong – Western and North Suburban Taxis being prime examples.

2.1.2 Demand and growth patterns

The VTA submission contained a range of data from survey work it undertook in conjunction with the Victorian Taxi Directorate. It was estimated that Victoria's taxi-cab industry carries in excess of 25 million passengers annually, contributing approximately $320 million in fares.[4]

Demand for taxi-cabs stems from three main groups:

- the corporate sector, which particularly uses taxi-cabs for transport between other transport terminals, such as airports;

[4] Submission of VTA, p. 5.

- households, who use taxi-cabs for leisure or commuting purposes; and
- tourists, from both interstate and overseas.

The VTA has estimated that the group breakdown is:

- $100 million from the corporate sector (31 per cent);
- $170 million from the household sector (53 per cent); and
- $50 million from the tourist sector (16 per cent).[5]

The VTA also presented data derived from the Australian Bureau of Statistics (ABS) survey of household expenditure patterns in 1993-94. This survey revealed that on average each Victorian household spent $1.62 per week on taxi-cabs, or $81.11 per annum (1998 values). This works out to a total of approximately $139 million per annum.[6]

There is also evidence to suggest that low-income earners spend proportionally higher amounts on taxi-cab services. The ABS survey has the lowest 20 per cent of households by income contributing 13.6 per cent of total taxi-cab revenue, compared to 10.1 per cent of total commodity and service expenditure.[7]

Data on international tourists suggests that demand from this sector has grown rapidly – the VTA estimated growth of approximately 10.7 per cent per year between 1990 and 1996 in terms of expenditure by visitors on taxi-cabs and hire cars.[8] Other data from the *International Visitor Survey* shows that international visitor nights in Melbourne have almost tripled in the last 10 years, confirming the strong demand growth in this market segment.

The airport market is consequently quite important in Melbourne. The VTA estimated that some 10-11 per cent of all taxi-cabs trips in Melbourne are airport journeys. The proportional value of these journeys is higher, as they are usually longer than that for an average taxi-cab fare.

To assist in developing a picture of demand for taxi-cabs in Melbourne, Black Cabs Combined provided data on its fleet for a single week in March 1999. Other companies did not respond to a similar request made through the VTA. While there may be differences in demand at certain times of the year it appears this sample is generally representative of the industry. Figure 2.1 shows the number of jobs dispatched by radio on different days of the week. A rule of thumb in the industry is that there is approximately 1 radio job for every cruising job (in the Metropolitan area); thus this could be taken as indicative of total demand

[5] Submission of VTA, p. 27.

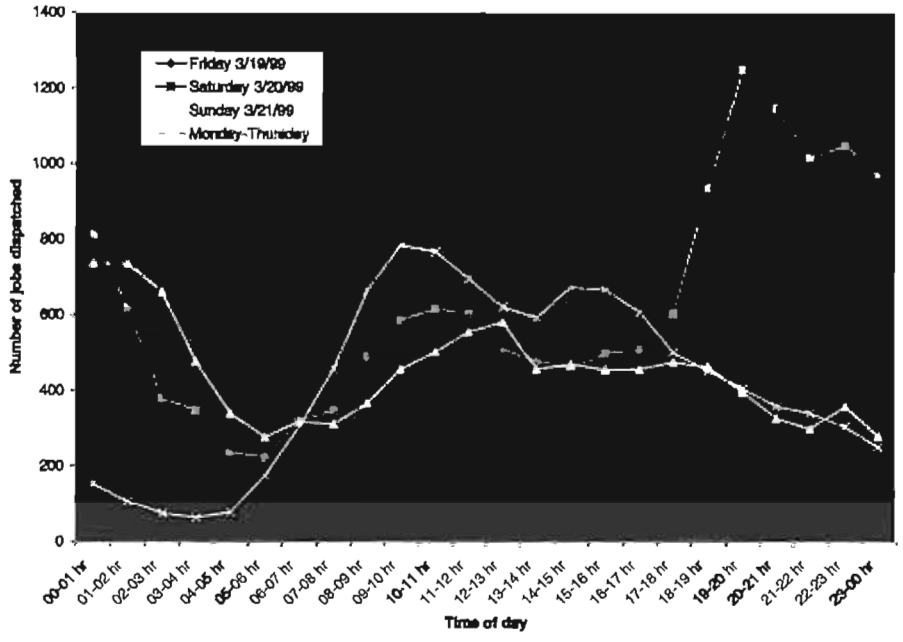
[6] Submission of VTA, p. 25.

[7] *ibid.*

[8] Submission of VTA, p. 27.

for taxi-cabs. It shows that the peaks in demand are generally on Friday and Saturday nights, while nights from Sunday-Thursday are typically quiet.

Figure 2.1 Demand for Black Cabs Combined Taxis, booking only



Source: Black Cabs Combined

2.1.3 Influences on demand for taxi-cabs

The evidence on demand factors in relation to taxi-cabs is relatively inconclusive. For the corporate sector, the major influences on demand tend to be the level of economic activity and incomes – domestic real disposable income is a good indicator, while for tourists it is economic conditions overseas. There seems, however, to be some suggestion that there may be a correlation the other way for households and real income. This suggests that taxi-cab services may be in the nature of an inferior good – as incomes rise, consumers switch to more preferred transport options such as a private car. Other major influences on demand include the cost of substitute transport – primarily public transport such as trains, trams and buses, as well as the cost of private cars.[9]

The effect of prices on the quantity of taxi-cab trips demanded is measured by the price elasticity of demand. This provides an indication of, for example, the effect of a 1 per cent increase in fares on the percentage decrease in the quantity of taxi-cab trips demanded. The

[9] IBIS Business Information Services, *I6123 – Taxis and Other Road Passenger Transport.*

most common estimate in available taxi-cab literature seems to be about –0.8. That is, a 1 per cent increase in fares would cause a –0.8 per cent fall in the number of taxi-cab trips demanded. An important practical result of this is that a fall in taxi-cab fares would result in a fall in overall industry revenue. However, the rigorousness of the –0.8 estimate has not been tested in the Melbourne market today and it is uncertain how valid this estimate might be for Melbourne and other Victorian markets.

For certain consumers, there is little choice as to their mode of transport. Trains, trams or buses can be unsuitable for the elderly or infirm, or may not run at the time when required. The Victorian Government recognises the need to ensure accessible transport for citizens through the "Multi-Purpose Taxi Program", which subsidises taxi-cab travel for those who meet certain criteria. Users of the Multi Purpose Taxi Program make some 4.8 million subsidised trips annually. Last year the budget for this program was $36.8 million – over 10 per cent of industry revenue (see Table 4.1). In addition to this program, disabled passengers are catered for by the Central Booking Service which dispatches work to wheelchair accessible taxi-cabs.

Demand for taxi-cabs is significantly affected by the time-of-day, seasons and "special events." The availability of taxi-cabs during peak periods is discussed further in section 4.6.

2.1.3.1 Other small commercial passenger vehicles

Hire car demand is largely a function of the regulation that limits hire cars to a specific role. RHVs and SPVs are similarly restricted. That is, consumers of these services must pre-book and be willing to pay the rates for the higher quality or differentiated vehicle that is required by regulation. Broadly speaking, the demand for these services stems from:

- corporate and business demand (hire cars);
- airport traffic (hire cars);
- weddings and debutante balls (all forms);
- non-emergency patient transport demand (RHVs);
- other vehicles that are constructed or driven for a certain purpose (e.g. motorcycle hire, 4WD hire) (RHVs and SPVs);
- demand for tourist activities (RHVs and hire cars); and
- demand for other activities which may be authorised by the Victorian Taxi Directorate (usually SPVs).

The scale of this demand is difficult to ascertain, as these industries have tended to be quite fragmented in their operation.

2.1.4 Country and outer-metropolitan areas

The Victorian Taxi Directorate similarly regulates taxi-cabs and other SCPVs in country areas. These licences are segmented in country taxi-cab zones, which restrict taxi-cabs from operating exclusively outside these areas. Taxi-cabs operating from the 'outer-metropolitan' areas of Frankston and Dandenong have country taxi-cab licences. Licence conditions prevent metropolitan taxi-cabs from picking up passengers in these zones, although they may carry passengers into them.

2.2 Role within the public transport system

There was some support in submissions for the notion that taxi-cabs, in particular, are part of the larger public transport system in Victoria. This expectation does not apply to other SCPVs. In part, this is due to regulations that require taxi-cabs to be 'common carriers' – that is, they must be able to be hired on demand.

Unfortunately, there is a paucity of reliable data highlighting the role of the taxi-cab in relation to other public transport. Much of the data has to be derived or implied from other calculations.

Some comparative figures in Table 2.1 are provided, showing the status of the industry at the time of the last major Victorian inquiry into taxi-cab services – the 1986 *Report of the Taxi Inquiry - Melbourne and Metropolitan Area* (Foletta Report).[10] The data applies to the Greater Melbourne area only.

[10] Foletta, B. (1986). *Report of the Taxi Inquiry - Melbourne and Metropolitan Area*. Melbourne, Ministry of Transport.

Table 2.1 Comparative public transport statistics

Year	Taxi-cabs (1983)	Taxi-cabs (1998)	% change	Trains (1984/85)	Trains (1997)	% change
Vehicle kms	258,000,000	390,000,000	*51.1%*	14,200,000	15,100,000	*6.3%*
Passenger trips	24,200,000	22,400,000	*-8.5%*	86,300,000	112,627,000	*30.5%*
Average trip length	5.9	10	*69.4%*	15.3	Est 15.3	--
Passenger kms	143,000,000	280,000,000	*95.8%*	1,320,000,000	1,723,193,100	*30.5%*
Fare revenue	Est $250,000,000	$284,000,000		$149,800,000[1]	$254,771,000[1]	
Operators or employees	8,000	Est 7,000-9,000		7,000	9,000	

Source: KPMG, Public Transport Corporation Annual Reports, Foletta Report, VTA submission
Notes (1) fare revenue includes tram and bus revenue.

The table suggests taxi-cabs account for a high proportion of vehicle kilometres travelled and over 20 per cent of passenger trips. It also suggests that the growth in the patronage of trains is exceeding the growth in taxi-cab trips. We believe, however, that the most recent data on taxi-cab trips may not be very accurate so that it is difficult to be too definite on relative growth of the different transport modes.

2.2.1 Review of large commercial passenger vehicles

The Review of the Transport Act is also encompassing a review of the relevant provisions relating to large commercial passenger vehicles (LCPVs) and of the *Public Transport Competition Act 1995* provisions relating to LCPVs. An independent panel in association with consultants is undertaking this review. It is a concern of both reviews that any recommendations are consistent with each other – that is, should not create artificial distortions in competition between LCPVs and SCPVs.

Primarily the overlap between the two reviews is likely to relate to:

- the requirements for licensing or accreditation of small and large commercial passenger vehicles, particularly where they are potentially in competition;
- subsidisation of route services (buses, trams and trains are subsidised);
- restrictions on taxi-cabs and other SCPVs running on regular routes.

The first issue is similar to a 'competitive neutrality' issue – that is, that firms should compete for business on the basis of efficiency rather than government-created distortions.

This could have significance across the market for the transport of tourists and for public transport contracts. The second and third are perhaps a reflection of the historical tendency by governments to protect other public transport services (further discussed in section 4.1) and to minimise subsidies. The scale of the subsidisation of public transport is significant – the most recent figures showing that the operating subsidy for buses, trains and trams is in the order of $337 million.[11] While the taxi-cab industry benefits from consumer subsidies (the Multi Purpose Taxi Program provides approximately $35 million), the scale of bus, tram and train subsidies is much larger. Subsidies for taxi-cabs are better targeted to those in need.

2.3 Impact on tourism

Tourism is a significant industry in Victoria and the Government places considerable importance on the effect of commercial passenger vehicle transport on tourists.

Policy statements concur with the view that the taxi-cab industry, particularly, helps promote the State as an attractive destination for tourists.[12] The Regulatory Reform Task Force review of regulation in the tourism industry noted that "road transport services are a fundamental part of any tourism experience"[13], while the Victorian Taxi Directorate is charged with responsibility for:

> "ensuring and maintaining the Government's objective of a "world class" taxi-cab service for Victoria which meets the needs of the community and the tourism industry, and promotes a positive image of Victoria for all taxi-cab users."

Taxi-cabs tend to be used for transport to and from other transport venues (such as the airport) and for major sporting and cultural events. Other SCPVs (such as mini-buses) tend to be used for transport to specific tourist attractions (e.g. Phillip Island). Both of these market segments are affected by this review.

While there is not a significant amount of data identifying consumers of taxi-cab services, tourists are significant users. The VTA submission identified tourists as an important source of revenue for taxi-cabs. Survey work undertaken by PPK Environment & Infrastructure for the Victorian Taxi Directorate and VTA in January and February 1998 also indicated that a significant proportion of users of taxi-cabs during major events were tourists. Of the sample (n = 1227), 29 per cent of respondents indicated they were either tourists (on holidays) or visitors (on business or for a particular event).

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[11] Department of Infrastructure, *Annual Report 1997-98.*

[12] Victorian Government (1995), *World Class Taxis for Victoria.*

[13] Regulatory Reform Task Force, *Tourism Industry: Regulatory Audit/Reform Discussion Paper,* June 1997, section 1.

2.4 Victorian Taxi Directorate

The Victorian Taxi Directorate was established in the Department of Infrastructure in February 1994 to carry out all regulatory functions related to taxi-cab operations. Prior to 1994, VicRoads regulated the taxi-cab industry – however, following a report critical of the current administration by the Parliamentary Crime Prevention Committee, a new body was established:

> "The Committee believes that VicRoads should not be the regulatory body for the taxi industry. There have been allegations of gross mismanagement, corporate interference and a general lack of understanding of the community and industry needs over a long period."[14]

The Victorian Taxi Directorate is charged with the administration of the parts of the Transport Act relating to SCPVs, including taxi-cabs, hire cars, RHVs and SPVs. Key functions include:

- Driver certification;
- assessing applications and issuing licences;
- implementing the multi-purpose taxi program; and
- enforcement of the Transport Act and Regulations.

Staff of the Directorate are currently allocated to the following areas:

Staff	
Administration	
■ Commercial Passenger Vehicles	19
■ Tow Trucks	3
■ Multi-purpose taxi program	6
Enforcement	18
Total	46

Source: Victorian Taxi Directorate

The Directorate's 1998/99 budget is broken into two components:

- $36.8 million is allocated to the operation of the Multi-Purpose Taxi Program, which provides subsidised taxi-cab travel for certain members of the community; and

[14] Crime Prevention Committee (1993), *op.cit.*, Melbourne, p. 10.

- $7.2 million to perform the balance of the Directorate's functions. This includes administration of the Multi Purpose Taxi Program (MPTP) and other contracted services, as well as tow truck administration.

The Directorate levies approximately $2.1 million in fees across the various passenger vehicle industries, and about $0.5 million from the tow truck industry.

It is arguable that the Directorate should be more self-funding, in line with the general principles for legislative review that "the direct costs should be borne by the immediate beneficiaries of regulation."[15]

[15] Department of Premier and Cabinet, *op.cit.*, p. 6.

3 Regulatory framework and restrictions on competition

3.1 Relevant markets for taxi-cabs and other small commercial passenger vehicles

The impact of regulation on competition must be assessed in the context of the relevant markets. A market is defined simply as the area of close substitution between firms. Substitutes may be on both the demand and supply sides of the market. Competition can occur in a number of market dimensions including product, geographic, time and functional dimensions. How broadly or narrowly these market dimensions are defined will be important to the analysis of whether competition is restricted by legislation.

Taxi-cabs provide a unique service with flexibility of pick up point and destination as well as privacy for passengers. Other forms of commercial passenger vehicle transport provide services that are likely to be substitutes to varying degrees for taxi-cab services. These include public and private commercial passenger vehicles – hire cars, buses, trains. There may also be complementarities between these different modes of transport.

Broadly speaking three distinct market segments for the supply of taxi-cab services can be identified:

- the 'cruising' segment – where taxi-cab drivers pick up customers from the street after being hailed;
- the 'rank' segment – where customers queue at a designated point for pick up (a taxi-cab rank);
- the 'pre-booked' segment – those cabs that are booked by phone and dispatched to drivers via a depot.

We do not have accurate estimates of the percentage of total taxi-cab trips that these segments account for. The limited evidence that we have (from a 1993 VicRoads survey and from industry anecdotal evidence) suggests that in Metropolitan Melbourne some 50-55 per cent of jobs are picked up in either the cruising or rank segments. However, we would expect this percentage to be lower where population densities are thinner (i.e. the outer metropolitan and country zones). In country areas, the bulk of taxi-cab work is understood to come from pre-bookings.

The Australian Competition and Consumer Commission, in its assessment of the application for merger authorisation from Silver Top and North Suburban Taxis, discussed the question of market definition. The Commission made the following points:

- markets were generally accepted to be regional;

- the product dimensions were less clear – Silver Top contended for a single functional market encompassing all taxi-cab services to the public, whether phone-booked, hailed or taken from a rank. However, the Commission stated it was apparent that in some circumstances street or rank hire will be very inferior, or no real substitute to pre-booking a taxi-cab;

- there was little evidence to suggest that other forms of public transport were constraining the prices of taxi-cabs, and were indeed complementary rather than substitutable[16];

- hire cars were not offering a "close degree" of competition with taxi-cabs; and

- one of the relevant markets was the provision by taxi-cab operators of taxi-cab services to the public in the Melbourne Metropolitan area.

However, it is important to note that regulatory requirements impose impediments to competition and the product market might be defined differently in the absence of these regulations. In particular, we consider that the market definition should not specifically take account of the delivery of the service (i.e. whether hire car or taxi-cab) but instead look at the type of service offered (whether pre-booked or street hailed or rank hailed).

Taking this view it is apparent that cruising and rank segments are highly substitutable from a consumer's point of view (a "cruising" market). However, we see that the cruising market has fundamentally different characteristics from the pre-booked market:

- ranks are subject to a 'first in, first out' rule, which means that taxi-cabs are likely to attract work if they are prepared merely to wait at a rank[17], whereas calling by phone allows for choice of taxi-cab company;

- cruising taxi-cabs are prevented from 'touting' for business, while in phone markets this form of 'selling' can be more readily achieved through advertising; and

- using the phone allows for ready price comparison, although in the current regulatory environment where fixed fares apply for taxi-cabs, this has little practical significance.

It might be argued that these differences are accentuated by regulation (particularly as cruising taxi-cabs are prevented from effective service differentiation by type of vehicle, fare level, etc.). However, while there may be overlap at the edges of the cruising and booking

[16] ATPR (1995), 50-209, p. 56,216.

[17] The Victorian legislation allows consumers to bypass this rule. Regulation 33(6) states that "a taxi-cab driver who is first in line at a taxi-cab stand is entitled to be hired before any other driver", while 33(7) states that "a passenger may choose any taxi-cab standing on a taxi-cab stand without having to choose the first taxi-cab in line." This exemption does not appear to be widely known and in practice consumers would rarely choose anything other than the first taxi-cab.

markets these services are generally not highly substitutable from a consumer's point of view.

There was considerable support in submissions for the view that there are well-defined geographical markets for taxi-cab services. Again this is affected by regulation (zoning restrictions are explicit in licence conditions), but it is clear that there are limits to substitutability between towns and cities.

Industries generally have different functional levels over which competition can occur. In the case of taxi-cabs, network and depot operations can be seen as distinct from the retail services provided by taxi-cab operators directly to customers. Depots compete for licence owners by providing services to members. Economies of scale in network operation appear to have led to a rationalisation of service mainly to two major Metropolitan networks, which provide bureau services to other depots. Networks may have natural monopoly characteristics, that is, greatest efficiency might be achieved by having only one operator at this level. However, at this point in time, there are still several viable operators, and while a tendency towards concentration has been noted also in other Australian cities, there are not any large cities under the control of a single network. Mobile phone technology also shows that the potential for low cost networks may undermine the tendency towards natural monopoly.

Other SCPVs can be integrated within this framework. In the absence of regulation, 'hire cars' and 'taxi-cabs' (which are merely vehicle classes established by regulation) would operate in both the broader pre-booked and cruising markets – in these markets there would be a high degree of substitutability between taxi-cabs and hire cars. Other passenger vehicles, such as RHVs and SPVs, tend to operate in more specialised pre-booked markets, such as markets for weddings and for transport to tourist activities. These are also likely to be broadly regional in nature.

3.2 Transport Act 1983 and Regulations

Broadly speaking, the SCPV sector currently attracts both 'economic' and 'quality' regulation. Economic regulation supplants ordinary market decision-making by limiting firms' ability to undertake market entry or pricing decisions. Quality regulation, conversely, focuses specifically on physical standards of performance, without determining who supplies services or at what price.

SCPVs, including taxi-cabs, are regulated under the *Transport Act 1983*, the *Transport (Taxi-cabs) Regulations 1994* and the *Transport (Passenger Vehicles) Regulations 1994*. These provide for controls on:

- entry into the industry, by ensuring that it is illegal to enter the industry without a licence (with the actual decision to grant a licence at the discretion of the Minister (in the case of taxi-cabs) or the licensing authority (Secretary to the Department) in the case of other SCPVs, subject to the requirements of the Act);

- competition between different modes of transport;
- the price that taxi-cabs, and to some extent other passenger vehicles, may charge; and
- restrictions on the quality and type of service provided, encompassing such measures as driver qualifications, safety devices and standard requirements on drivers and cars.

Accordingly, in this report, we examine competition restrictions under the headings **Entry Restrictions**, **Inter-modal Restrictions, Price Restrictions** and **Quality Restrictions** respectively. The first three of these may be considered to be economic regulation. These distinctions are not precise, and there is some overlap between them. For example, a requirement for a taxi-cab to belong to a depot could be seen as an entry or a quality restriction.

We consider that restrictions on competition can not always be strictly determined from the legislation. Often our classification of restrictions will depend on the operation of the provision in practice – for example, how readily a person can obtain a licence may depend on the legislation as well as the decisions of the licensing body. This is an important part of NCP reviews – identifying where and how legislation restricts competition in practice.

Division 5 of the Transport Act regulates commercial passenger vehicles. Some provisions apply to taxi-cabs specifically, while others apply to all commercial passenger vehicles (including hire-cars, SPVs, etc.). These provisions are summarised in Table 3.1. A summary of the Regulations is provided in Appendix B.

Table 3.1 Summary of provisions of division 5 of the Transport Act

Vehicle / Licence type	Licence and driver certificate required		Public interest test for new licences		Hearing of applications and objections		Licence transferable		Licence able to be assigned	
Taxi-cab	✓	s139, s162	✓	s143	✗	s141A	✓	s149	✓	s150
Private hire car	✓	s139, s162	✓	s143	✓	s142	✓	s149, s162(1)	✗	s150
RHV	✓	s139, s162	✗	s141B	✗	s141b	✗	s149, s162	✗	s150
SPV	✓	s139, s162	✓	s143	✓	s142	✓(2)	s149, s162	✗	s150

Notes: (1) The ability to transfer and assign a licence is prevented by licence conditions and Regulations made under s162

(2) SPV licences are ordinarily transferable after 4 years

All forms of commercial passenger vehicle require the vehicle to be licensed and the driver to be certified. The Victorian Taxi Directorate (on behalf of the licensing authority) issues licences for operation of:

- Metropolitan zone taxi-cabs;
- Outer suburban taxi-cabs;
- Country taxi-cabs;
- Commercial passenger vehicles operated as "hire cars";
- SPVs; and
- RHVs.

Other categories and classes of licence (such as restricted hire motorcycle licences) are issued by the Victorian Taxi Directorate on an "as needed" basis.

3.2.1 Taxi-cabs

There are three primary layers of regulation of taxi-cabs – the provisions of Division 5 of the Transport Act, the Passenger Vehicle (Taxi-cab) Regulations and the licence conditions imposed under Division 5.

Licensing imposes both qualitative and quantitative controls on the industry. Drivers and licence owners, as well as vehicles, are regulated (through the use of driver's certificates and licence conditions).

Section 139 of the Transport Act states that commercial passenger vehicles are not to operate unless licensed. Of itself, this provision does not necessarily restrict competition – if, for example, licences were issued to all applicants meeting basic fitness to operate criteria. There are, however, a number of other provisions that effectively restrict competition in the taxi-cab market:

- Section 143 of the Transport Act sets out the matters to be taken into consideration before grant or refusal of a licence. The primary consideration is the "interests of the public generally", while specific criteria include:
  - the advantages of the service proposed to be provided, and the saving of time that would be effected thereby;
  - the existing transportation service for the conveyance of passengers upon the routes or within the area proposed to be served in relation to -
    - its present adequacy and probabilities of improvement to meet all reasonable public demands;

- the effect upon that existing service of the service proposed to be provided; and
- the fares paid by those passengers;

- any reports by municipal councils or the Public Transport Corporation;
- the character, qualifications and financial stability of the applicant; and
- any other relevant matters.

It is suggested that the nature of this test is contrary to principles of National Competition Policy. In general, the onus is on the applicant to demonstrate that the application would be in the public interest. NCP would suggest that the presumption should be on granting applications unless they are demonstrated by an independent regulator to be against the public interest.

The licensing authority is also required to refuse a licence if granting it would be inconsistent with policy determinations made by the Minister.

While there is a public interest test in place, new licence applications for the Metropolitan area are not effectively considered by the licensing authority. Licence applications for country areas are considered and evidence provided to the Review suggested the Victorian Taxi Directorate authorised the issuing of licences if demand conditions were present to sustain them.[18] However, it is undoubtedly the case that licences are restricted in number in country markets.

Other powers, contained in section 143A, allow the proclamation of certain areas as taxi-cab zones for the purpose of issuing licences. These provisions have been applied to create the Frankston and Dandenong (Outer suburban) taxi-cab-zones, as well as country zones. Licences specify that the picking up of passengers for journeys solely outside of these zones is prohibited. These provisions therefore restrict competition between taxi-cabs in different zones.

3.2.1.1 Regulations and Licence conditions

The Regulations are quite detailed and prescriptive in relation to the appearance of taxi-cabs and behaviour of taxi-cab operators.

These Regulations indicate obligations of taxi-cab licence holders, drivers, persons, hirers and passengers on a range of matters. They also refer to the powers of the Secretary of the Department and the Victoria Police. The Regulations are summarised in Appendix B with the numbers according to the Regulation numbers.

[18] Submission of Peter Trost, p.3.

As a condition of the licence issued under the Transport Act, taxi-cabs:

> "may be hired by the public on demand and must be used so as to maintain regular and continuous service."

The Victorian Taxi Directorate has indicated that it does not interpret this condition as requiring all taxi-cabs to be on the road 24 hours a day, but sufficient taxi-cabs must be in service to meet public demand at any time of the day.

The VTA claimed that the obligation as a 'common carrier' was inherent in regulations that require a taxi-cab to:

- not refuse a hire, except under limited circumstances (reg. 22, 30);
- may not multiple hire without consent of other passengers (reg. 34(8));
- may only charge for the metered fare for the journey (reg. 34(2)); and
- cannot ask for any fare other than that shown on the meter (reg. 34(2)).

The Association suggested that the "fact that a taxi-cab is a common carrier has important cost and hence competition implications."[19] It noted that because of this requirement:

> "- hirers gain certainty of price in respect of a hiring;
>
> - transactions costs to hirers are minimised;
>
> - a lack of bargaining power, especially by the elderly and infirm, and tourists and other new purchasers does not lead to exploitation;
>
> - consumers who lack a knowledge of the market are protected from price gouging;
>
> - service delivery is uniform across the market;
>
> - conflict among drivers, and between drivers and prospective hirers (especially hirers under the influence of alcohol) is minimised;
>
> - the taxi-cab sector as a whole generates sufficient income to remain viable while providing essential infrastructure to service consumer needs on an efficient basis."[20]

[19] Submission of VTA, p. 4.

[20] Submission of VTA, p. 5.

The common carrier arguments are not completely convincing. Service refusals are mostly an outcome of fare regulation, that is, where the fares from a journey will not meet its costs there will always be incentive to refuse the fare in favour of a more profitable fare. Hence, the obligation can be considered under the costs and benefits of regulating fares in this manner. The only circumstances in which the obligation seems to apply is where a fare is refused for reasons other than price, for example, where a potential passenger is drunk.

Another important licence condition is that a taxi-cab must charge only the fares and hiring rates approved by the Victorian Taxi Directorate. These rates are attached as a schedule to licences. These rates are fixed throughout the whole of Victoria (with a slight difference in the booking charge in country areas). No negotiation on these fares is permitted with the exception of journeys involving the carriage of passenger to or from further than 80 kilometres from the GPO described in the licence.

Other significant licence conditions for taxi-cabs, which are discussed in more detail later in the report, include:

- the taxi-cab must not run a regular service on any route;
- the taxi-cab must be fitted with a complying taxi-cab-meter;
- a requirement that leasing arrangements (to another driver) cannot be made without Victorian Taxi Directorate approval.

3.2.2 Depots

Taxi-cab depots are regulated by virtue of a licence condition for all Metropolitan, Urban, Outer-suburban and Country taxi-cabs. Condition 1.4 of these licences states that:

> "The vehicle/s so licensed...must at all times be operated under radio control from a depot approved by the Victorian Taxi Directorate."

Depot requirements are set out in the "Guidelines for Authorisation of a Taxi Depot" published by the Victorian Taxi Directorate. The basic requirement is that the applicant must demonstrate that the establishment of the depot will be in the public interest. Again it would appear that the spirit of this test is contrary to National Competition Policy principles, with the onus on applicants rather than the Directorate. To comply with this test the requirements of the Victorian Taxi Directorate are that the depots must:

- submit a business plan of establishment arrangements;
- be managed by an incorporated body with directors subject to 'fit and proper
- provide a 24-hour monitoring service that includes driver warning facilities;
- comply with any code of practice requirements that the Victorian Taxi

person' tests;

- operate on a 24-hour, 7 day-a-week basis;
- service all advanced bookings;
- operate an independent communications system with 24 hour two way communication to all operating vehicles;
- submit regular depot data reports; and

Directorate requires;

- maintain records to the satisfaction of the Victorian Taxi Directorate;
- be responsible for ensuring that drivers meet the requirements of industry regulations;
- carry out inspections on all taxi-cabs on a quarterly basis, and ensure that vehicles do not breach licence conditions;
- demonstrate an ability and commitment to discipline effectively drivers and/or operators who fail to meet government, industry or depot standards.

It is clear from this list that depots are required to perform certain regulatory responsibilities in relation to their vehicles and drivers. Some of their requirements seem to relate to the common carrier notion of meeting all requests for service. We have a concern about the application of commercial criteria for depots, for example the requirement to submit a business plan. Such requirements involve considerable discretion by the licensing authority and do not appear to be closely related to the fundamental purpose of licensing which should, in our view, be to ensure minimum standards for vehicles and drivers.

Depots also have a number of rules as a condition of membership. These rules are a source of contention for some in the industry.[21] However, these rules are subject to the *Trade Practices Act 1974* and are not themselves the subject of this review. During the course of the Review we requested copies of the rules of the individual depots. These were not provided although the VTA did provide a draft set of model rules for depots. This draft had not yet been approved by the ACCC.

The requirement that all taxi-cabs must be operated under radio control may prevent taxi-cabs from exclusively operating from another form of network (i.e. mobile phone or pager). While some drivers do carry mobile phones, it is unclear as to the legal status of these arrangements – that is, whether a driver choosing to respond to a mobile phone call instead of a depot booked call could constitute a breach of the licence condition.

[21] Many submissions to this Review expressed discontent with the current operation of depots. In particular, this has been in relation to the operation of 'bureau' services and the holding (company) structure of the depots. It was claimed that this restricted competition between the depots. See submissions of Mr Peter Manikas, Mr Marcel Bugeja, Mr Vincent Maltese.

The Trade Practices Commission has acted to prevent depots prohibiting the use of mobile phones by their member vehicles. It would be inappropriate if the licensing authority in effect inhibited the use of mobile phones by drivers.

3.2.3 Drivers

Drivers of taxi-cabs must hold a commercial passenger vehicle driver's certificate, which is issued by the Victorian Taxi Directorate. The Regulations provide for the Victorian Taxi Directorate to require an applicant to:

- pass any test that relates to an applicant's fitness to drive a taxi-cab;
- undergo a medical exam; and
- undergo an eyesight test.

The Victorian Taxi Directorate currently requires satisfactory medical and eyesight reports and the result of a national check of Police records against the applicant and a check of driving offences before issuing a driver's certificate. Drivers of Metropolitan taxi-cabs must also pass the Certificate Course in Taxi Driving and prerequisite tests in English Language and Numeracy Skills and a knowledge of Melbourne test (introduced in 1996).

Currently there are 18,000 driver's certificates on issue by the Victorian Taxi Directorate. However, not all of these certificate holders are actually driving – one estimate suggested to us that there were approximately 6,750 drivers currently engaged in driving vehicles in the Metropolitan area.[22] The VTA submission suggests that there are 9000 active drivers.[23] Many of these drivers will not have undertaken the training that new applicants must undergo.

Drivers are generally contracted through the use of a 'Driver Leasing Agreement'. This has the status of a private contract between the taxi-cab operator and the driver, although at one stage it was compulsory to use a standard lease agreement. The agreement establishes the roles and responsibilities of drivers (lessees) and licence owners or assignees (lessors). Leases generally follow what is commonly known as the '50/50' rule. This is where the rent for the lease of the vehicle and the use of the licence is 50 per cent of all metered fares collected by the driver. Other costs may be incurred by drivers (e.g. insurance costs). Under the Regulations drivers are required to meet uniform costs.

Drivers are not considered to be employees of licence owners or assignees. They are referred to as 'lessees' or 'bailees' of the owner. Hence they are not paid wages or subject to conditions applicable to an employee, such as annual leave or WorkCover provisions. This is further addressed in section 11.1.

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[22] National Taxi Council of Australia and Victorian Taxi Driver's Association communication.

[23] Submission of VTA, p. 21.

3.3 Other commercial passenger vehicles

The licence categories for private hire cars, RHVs and SPVs operate to differentiate or prevent competition between taxi-cabs and these vehicles. The primary provision that appears to operate in this manner is section 143 of the Transport Act, which requires applicants to demonstrate that the approval of the licence would be in the interests of the public generally, including the effects on those providing similar services. RHVs are a relatively new licence category (*Transport (Amendment) Act, No. 2, 1993*), however, which does not require application of the public interest test ("as of right" licences). This category was introduced to speed the process of licence application. Restricted hire licences were made non-transferable to ensure that the "costly trading of this type of licence, so inherent with other passenger vehicle licences, will not exist."[24]

There are also other licence conditions that segregate these markets. For example:

- hire cars can only be certain 'luxury' vehicles which have specific maximum age requirements;
- the vehicles must be pre-booked (no plying (cruising) or touting);
- vehicles are prevented from operating on certain routes or in certain areas;
- hiring rates must be agreed prior to the journey;
- licence conditions ensure vehicles are of a luxury standard (hire cars) or of special purpose (e.g. right-hand 4WD); and
- special conditions are placed preventing the transport of passengers outside tightly defined circumstances.

It is evident that this has not eliminated all competition between the various categories of SCPVs. The VTA in fact noted that it was concerned about the increasing competition coming from the hire car industry (given its advantages in terms of price flexibility and non-"common carrier" status), particularly the SPV sector, for the discretionary door to door transport market dollar.[25]

These vehicles are also subject to the requirements of the *Transport (Passenger Vehicles) Regulations 1994,* which further require that:

- a driver's certificate must be held;
- records relating to the operation of the vehicle must be kept; and

[24] Hon. Alan Brown, *Transport (Amendment) Bill 1993*, Second Reading Speech.

[25] Submission of VTA, p. 22.

- vehicle specifications set out in Schedule Two of the Regulations are followed.

Licence conditions, and the difference between taxi-cabs and other SCPVs, are highlighted in Table 3.1.

Table 3.1 Summary of licence conditions for SCPVs

Licence type	Hired on demand	Must operate from depot	Car restrictions	Hiring rates determined	Cruising market?	Route restrictions?
Taxi-cab	✓	✓	Age limits	fixed by Victorian Taxi Directorate	✓	✓
Hire car	✗	✗	Age limits Special vehicle type (luxury saloon)	by agreement	✗	✓
RHV	✗	✗	Special vehicle	by agreement	✗	✓
SPV	✗	✗	Special vehicle	by agreement	✗	✓

These vehicles are affected by similar entry restrictions to those for taxi-cabs. Applicants must show that the application for the licence is in the "public interest", based on existing demand and supply conditions. Differences to taxi-cab applications include:

- for a RHV licence, a person must be a "fit and proper" person to hold such a licence;

- applications for licences (apart from RHV licences) are subject to objections under s.142(5), including from competitors to the proposed service.

It is not clear why there are different requirements for RHVs in terms of a 'fit and proper person' test. For other licences, transfers must be approved by the licensing authority who must be satisfied that the person to whom the licence is to be transferred is a 'suitable person' having regard to character, qualifications and financial stability.

The Regulatory Reform Task Force report on the Tourism Industry provided one example of how the application process for a SPV can have adverse competition consequences.[26] It notes that satisfying the requirements of section 143 (particularly establishing the demand for the service) is difficult, and that it is standard industry practice for industry associations to object automatically to applications for new licences. The result is often delays of 12 months or more to receive a licence, involving not only the direct loss of money in

[26] Regulatory Reform Task Force, *op. cit.*

preparation but also in revenue forgone. The RHV category avoids this restriction.[27] However, restrictions remain for other vehicles providing passenger services.

Table 3.2 and Table 3.3 illustrate the number of licence applications received for hire cars in the last few years and the number of licences that were refused. In total, it shows that over 64 per cent of applications in the Metropolitan area were refused (with only 12.5 per cent of these appeals successful) and 50 per cent of country applications were refused (with none successful at appeal). This indicates that the public interest or need criterion is operating as a major restriction on competition by preventing the entry of otherwise suitable operators.

Table 3.2 Metropolitan Hire Car applications

Financial Year	Applicants(1)	Applications (Licences)	Granted (Licences)	Refused (Licences)	Appeals		Granted on Appeal
					Applicants	Applications	
1995-96	63	81	32	49	6	10	Nil
1996-97	21	28	6	22	15	20	6(2)
1997-98	12	19	5	14	7	8	Nil
1998-	8	21	10	11	3	10	Nil
Total	**104**	**149**	**53**	**96 (64%)**	**31**	**48**	**6 (12.5%)**

Source: Victorian Taxi Directorate

Notes: (1) Applicants can apply for multiple licences (applications)

(2) On three of these licences special conditions were placed on the vehicles

Table 3.3 Country Hire Car applications

Financial Year	Applicants	Applications (Licences)	Granted (Licences)	Refused (Licences)	Appeals		Granted on Appeal
					Applicants	Applications	
1995-96	10	12	6	6	1	1	Nil
1996-97	3	3	2	1	2	2	Nil
1997-98	3	6	3	3	2	2	Nil
1998-	2	3	1	2	1	2	Nil
Total	**18**	**24**	**12**	**12 (50%)**	**6**	**7**	**Nil**

Source: Victorian Taxi Directorate

Other evidence also indicates that the requirement for consideration of the effect of the licence on competitors can have adverse effects. The Administrative Appeals Tribunal has

[27] *Transport (Amendment) Bill* 1998.

in the past rejected licence applications explicitly for this reason.[28] It is clearly a restriction on competition for licence applications to be rejected in this manner. Considerations of "public amenity" or "potential demand for the service" serve to protect existing operators at the expense of potential competitors, and harm the public who are denied increased choice of service, lower costs and prices.

3.3.1 Drivers

Drivers of hire cars are required to hold the Victorian Taxi Driver Certificate under s.156 of the Transport Act. The same controls apply *viz.* criminal conviction checks, driver licence record check and medical report as for taxi-cab drivers. The Transport Act also provides that the driver's certificate can be revoked or suspended by Victorian Taxi Directorate if the conditions have not been complied with, if false information has been provided, or if the holder of the certificate is not a "fit and proper person."

3.4 Summary of restrictions

The restrictions identified are summarised into the four categories identified above. They form the basis for discussion in the following sections.

[28] See, in particular, *Caminti v Victorian Taxi Directorate (1997/17817)* in relation to the difficulties in application for a hire car licence.

Table 3.1 Summary of restrictions on competition

Type of restriction	Relevant provisions	Which market?	How the legislation or regulation restricts competition
Entry restrictions	Public interest licensing provisions for taxi-cabs, hire cars and other SCPVs	Markets for cruising and pre-booked passenger transport services	■ Licensing provisions prevent entry of otherwise suitable applicants
	Zoning restrictions (metropolitan, outer suburban, country areas) in Act and licence conditions	Geographic markets for cruising and pre-booked taxi-cab services	■ Prevents taxi-cabs from entering into other zones to pick up work, or to pick up return work
Inter-modal restrictions	Licence conditions and regulations that prevent regular route services (all SCPVs)	Markets for public transportation services	■ Prevents direct competition with trains, trams and buses ■ Prevents taxi-cabs competing for supply of public transport services
	Different requirements on hire cars and taxi-cabs: ■ Differential age and vehicle restrictions between taxi-cabs and hire cars ■ Plying for hire (hire cars and other SCPVs) prohibited ■ Hired on demand	Markets for cruising and pre-booked taxi-cab and other SCPV services	■ Imposes distortions on competition between hire cars and taxi-cabs ■ Prevents hire cars competing in 'cruising' market ■ Prevents 'niche' taxi-cab operations that focus on market segments only (e.g. airport)
Price restrictions	Taxi-cab fares are fixed as part of licence conditions Meters are prescribed by regulation Other SCPVs do not have fare regulation.	Market for pre-booked and cruising taxi-cabs	■ Restricts price competition between taxi-cab depots and between individual cabs
Quality (minimum standard) restrictions	These provisions are contained in the Act, Regulations and in licence conditions	Markets for pre-booked and cruising taxi-cabs, hire cars and other SCPVs Market for drivers of taxi-cabs and other SCPVs	■ There are many restrictions on the quality and standards of service. See Table 9.1 for summary. ■ These regulations can prevent competition on service quality and prevent innovation (new services developing).

4 Effect of restrictions on competition on industry performance

4.1 Introduction

In this section of the report we provide some general statistical background on the performance of the taxi-cab industry followed by a more detailed look at the characteristics of performance relevant for this review.

General comparative statistics were collected by the VTA and included in its submission to this review. Table 4.1 is based on data collected in previous surveys as well as current information. It relates to Greater Melbourne (Metropolitan and Outer-suburban zones).

Table 4.1 Industry Performance

Item	Year				
	1978	1983	1986	1987	1998
Taxi-cabs	2983	2987	3001	2890[1]	3247
Hires per taxi-cab per week	137	156[2]	134[2]	132	133
Hire per year (millions)	21.2	24.2	20.9	19.8	22.4
Total revenue ($1998 millions)	202	332[3]	156[4]	221	284
Average fare ($1998)	9.54	13.72[3]	7.45[4]	11.14	12.68
Average trip length (km)	6.3	5.9	7.6	8.2	10
Engaged to total kilometres	48%	55%	51%	53%	58%
Paid kilometres (millions)	133	142	119	163	224
Unpaid kilometres (millions)	143	116	115	144	166
Total kilometres (millions)	276	258	234	307	390
Revenue per taxi-cab per week ($)	1,303	2,135	999	1,470	1,684
Revenue per paid kilometre ($)	1.52	2.34	1.31	1.36	1.27
Revenue per kilometre ($)	0.73	1.29	0.67	0.72	0.73
Average distance per week per taxi-cab	1779	1661	1500	2043	2310

Source: VTA Submission

Notes:

(1) Does not include Frankston and Dandenong

(2) The sources for these figures reported passenger movements in taxi-cabs. The VTA assumed 1.2 passengers per taxi-cab on average

(3) The VTA considers the figures quoted in Wilson (1985) are too high.

(4) The revenue figures reported in the Foletta inquiry are considered by the VTA to be too low ($213 million total revenue and average fare $13.10 are considered more accurate)

The data provided is based on best estimates and it is difficult to know how reliable they are. The absence of a proper knowledge base relating to industry performance is a significant weakness of current regulation. Nonetheless a couple of interesting trends emerge:

- vehicles appear to be working harder, with total kilometres rising quite sharply;
- vehicles also appear to be working more efficiently, with better utilisation ratios between paid and unpaid kilometres; but, surprisingly
- this does not appear to be reflected in the number of total hires and subsequently the number of hires per taxi-cab.

We have some doubts about the veracity of the passenger trips numbers provided by the VTA given the sustained growth in taxi-cab vehicle kilometres and passenger kilometres. It is interesting to note in this regard that details supplied to the Victorian Taxi Directorate in 1994 by the VTA for the preparation of a Regulatory Impact Statement suggested that vehicles on average undertook 8400 trips per year (161 trips per week), which would equate to almost 28 million trips in Greater Melbourne. Another estimate from the VTA provided to the Crime Prevention Committee (1993) was that "taxi-cabs transport possibly up to 35 million passengers per annum."[29]

4.1.1 Comparisons across Victoria

The VTA also provided statistics (Table 4.1) relating to the revenue of cabs in the Metropolitan, Outer-suburban and Country fleets. On this basis it estimated that the total revenue for the Victorian taxi-cab sector was $317.5 million in 1998.

[29] Crime Prevention Committee (1993), *Developing a Safer Taxi Industry: Inquiry into Personal Safety on the Public Transport System*, Melbourne, p. 18. Note this figure is passenger trips, not hires per taxi-cab, although at 1.2 passengers on average it is still more than 29 million hires.

Table 4.1 Taxi-cab sector statistics – 1998

	Zone	No of taxi-cabs	Average Fare[1]		Fares per taxi-cab[2]		Total Revenue per taxi-cab		Zone totals	
			Meter	Km	Day	Year	Day	Year	Trips	Fares
Metro										
	Fleet cars	1,711			26	8,580	$ 337	$111,300	14,700,000	$ 190,400,000
	Owner / driver	1,400			16	45,776	$ 208	$59,400	6,400,000	$ 83,100,000
Total metro		3,110	$ 12.98	10					21,100,000	$ 273,500,000
Outer suburban		137	$ 8.00	8	30	9,900	$ 240	$79,200	1,400,000	$ 10,900,000
Total metro		3,247	$ 12.68						22,400,000	$ 284,400,000
Urban		238	$ 8.00	5	30	9,900	$ 240	$79,200	2,400,000	$ 18,800,000
Country		413	$ 7.00	7	15	4,950	$ 105	$34,700	2,000,000	$ 14,300,000
Industry total		3,898	$ 11.83						26,800,000	$ 317,500,000

Source: Victorian Taxi Association Submission

Notes: (1) data from operators

(2) Composition of the Metropolitan fleet is 55% fleet cars 45% owner/drivers

Assumptions:

1. Fare is for an average trip
2. Taxi-cabs worked 48 weeks a year
3. Metro owner driven vehicles work one shift a day
4. Metro owner drivers work six days a week for 26 days a month
5. Metro crewed (fleet) vehicles work 2 shifts a day for 30 days a month
6. All Outer suburban taxi-cabs assumed to be crewed

4.2 Driver and vehicle standards

In July 1994, new taxi-cab and passenger vehicle regulations came into effect. These were recognised as a sweeping attempt to raise standards among taxi-cab drivers and vehicles. A summary of these changes is as follows:

- All taxi-cabs to have distinctive Victoria Taxi Yellow livery (when purchasing a new vehicle)
- All drivers to wear a company uniform
- New English language and literacy test introduced
- All taxi-cabs to have fully functioning air-conditioning
- Taxi-cabs must be less than two years old at the time of registration
- Stricter and more frequent checks of taxi-cabs
- New 40 hour TAFE accredited entry course emphasising customer service skills
- "0" blood alcohol requirement for drivers on duty

The Victorian Taxi Directorate and the VTA intermittently assess the views of customers on standards of service quality. A series of reports by consultants Brian Sweeney & Associates and PPK in 1998 indicate in particular that:

- there are large variations in the quality of service provided by drivers;
- there have been significant improvements noted in relation to the requirements for yellow cabs, uniforms, clean cars and a smoke-free environment;
- customers perceive weaknesses in driver knowledge; and
- there is considerable concern with the long wait times in particular periods (especially weekends).[30]

Submissions to this review, in general, supported the notion that the reforms have been well accepted by consumers and others in the industry. Submissions addressed this point:

> "The industry in Melbourne in its present form has made great progress and has never exhibited a higher level of both vehicle and driver standards, including standard of service delivery to the customer..."[31]

> "We now have a reliable, clean and properly run industry compared to a few years ago."[32]

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[30] PPK Environment & Infrastructure (1998). *Travel Demand Survey. January and February 1998.* Melbourne, VTA and Victorian Taxi Directorate, Brian Sweeney & Associates (in conjunction with PPK, VTA, Victorian Taxi Directorate), *A Draft Qualitative Report on Consumer Attitudes,* June 1998.

[31] Submission of Mr Steven Tintas, p. 1.

While these views are positive, they also highlight weaknesses in the industry. First, the fact that the Government had to take the initiative of forcing through changes to the Regulations to improve performance suggests that effective competition in the industry is far from being realised. Secondly, it highlights the limited knowledge of the industry held by the regulators. There are few, if any, measures of performance that are collected by the Victorian Taxi Directorate on a regular basis. It is therefore difficult to measure the industry's performance over time. Effective fare regulation particularly relies on a solid flow of reliable information.[33] This inadequate database means that it is difficult to assess the impact of regulation.

Driver remuneration appears to be very low. The VTA provided a survey of driver earnings from March 1998, based on a sample of data from six large taxi-cab operators. Table 4.1 suggests gross hourly income is well below award-based levels of remuneration for comparable employment and is not much higher than unemployment benefits for single persons. Drivers also do not get paid sick leave or annual leave. There is likely to be variation in driver incomes, due to the skill of certain drivers in picking up fares, and the specific shifts worked.[34]

Table 4.4 indicates there is some variation in average hourly rates for day and night shifts and so variation depending on the total number of hours worked.

Table 4.1 Comparison of driver incomes

	Taxi-cab driver	Chubb (Security) Guard	Casual bus driver	Unemployment benefit (single)	Award wage (full-time)
Gross hourly rate	$6.67-7.52	$10.50	$14.13	$5.21	$11.31

Source: Victorian Taxi Association, 1998 Driver Survey, and Victorian Taxi Driver's Association

Table 4.2 Estimates of driver remuneration

	7 day 60 hours	5 day 60 hours	5 day 50 hours	Weekend 24 hours
Average day ($) (hourly rate)	7.02	7.36	8.83	6.08
Average night ($) (hourly rate)	8.02	7.51	9.02	9.38

Source: Victorian Taxi Association, 1998 Driver survey

[32] Submission of N.& M. Harrington, p. 1.

[33] See, in particular, Beesley, M.E and Glaister, S. (1983), "Information for Regulating: The Case of Taxis", *Economic Journal*, 93, 594-615.

[34] We were advised that the hourly rate for taxi-cab drivers in Adelaide was slightly higher, at approximately $8.20, and that these taxi-cabs did not earn as much as taxi-cabs in Melbourne. Hence there may be under-reporting in these figures.

While it is not clear whether all driver remuneration would be covered by the survey, eg. tips, it does seem to be generally acknowledged that drivers are low paid. Low levels of remuneration might be expected to affect the supply of drivers to the industry. In the past this has been a cause for concern, but it was only briefly alluded to during the current review. The VTA expressed some concern about the impact of the modest training requirement for certified drivers and the impact this has had on the number of new applicants. We see the issue here not so much in terms of the level of required training, since this is minimal, but rather in terms of the modest incomes of drivers. It means that a small cost impost can have a significant impact on driver availability.

Although licence owners and holders appear to be able to engage sufficient numbers of drivers at the present time, the quality of driver in the industry is not as high as it could be if there was a larger pool of potential drivers to choose from. Many new drivers are recent migrants to Melbourne, or are people working multiple jobs. Taxi-cab driving for this latter group is a way to supplement existing income.

Low driver remuneration contributes then to a lack of professionalism in the industry affecting the quality of service available to customers.

Low remuneration for drivers may not simply be the outcome of a fully competitive labour market. There is concern that high concentration on the demand side of this market (depots, fleet operators) and possible co-ordination between buyers of driver services may restrict competition and allow driver remuneration to be set close to reservation wage levels approximated by the level of single person unemployment benefits.

Although there are a large number of operators in the industry, at the depot level there is high concentration. Depots play an important role in acquiring labour services from drivers for individual licence owners or holders. Depots are able to closely co-ordinate their activities through the VTA. The Association has a standard agreement that it recommends be used for governing driver-leasing arrangements. This agreement provides for a 50:50 sharing of the metered fare between the licence holder and the driver. This impacts on the level of driver remuneration and also on the marginal effort of drivers – whose benefit from additional work is generally only half of the meter – and thus contributes to problems of driver availability.[35]

4.3 Licence values

Licences for all SCPVs except RHVs are transferable and have therefore taken on the nature of an asset. That is, the "right" to operate a taxi-cab can be bought, and has acquired considerable resale value. Licence values are a controversial issue, in the taxi-cab industry. Indeed, the high values that licences (plates) attract has caused consternation (particularly to

[35] This compares with the situation in Sydney, where shifts are 'purchased' from vehicle owners, and drivers receive the full marginal benefit of fares.

economists) around the world. The VTA maintain that licence values are not central to the debate about regulation. However, we consider that licence values are central to the debate about the problems with regulation. It is not that licence values are bad *per se,* but that they indicate that excess profits have been incorporated in taxi-cab fares at the expense of consumers of taxi-cab services. Taxi-cab licence holders will have benefited to different degrees from the current system. Those who acquired licences when values were low will be the largest beneficiaries. Many of these will have left the industry over time, taking their capital gains with them. Licence values are symptomatic of a broader problem with regulation in the industry.[36]

The obvious point to make is that licences only have value because they are scarce. In the Metropolitan area there has been virtually no change in Metropolitan Taxi licence numbers in the past decade since the response to the Foletta Report, as shown in Table 4.1. In 1991 50 licences for wheelchair accessible taxi-cabs were issued with the aim of ensuring that disabled passengers were better catered for than had previously been the case, while the issuing of 100 high occupancy vehicles (HOV) was also recently announced.[37] The HOV licences are designed to provide a solution to the problem of slow taxi-cab response times in peak periods. However, we do not consider this is necessarily the best way to deal with the problem, as discussed in Box 4.1.

Table 4.1 also provides some comparative demand data for the Metropolitan region.

[36] It is obvious that profits and therefore licence values could be made to fall by increasing costs – by restricting taxi-cabs to only work on weekdays, for example – but this does not make consumers better off. Prices must fall for this to occur.

[37] Press release by the Victorian Minister for Roads and Ports, Mr Geoff Craige, "Extra 100 Licences to Cut Waiting Times, on 17/12/1998.

Table 4.1 Licence and demand indicators for Metropolitan region

Year	Licences		Disposable income	Tourist nights		Real licence value[1]
	No.	People per licence	$ per household (Victoria)[1]	Domestic	International	
1951	1639	810	-	-	-	-
1961	2188	910	-	-	-	-
1971	2813	920	-	-	-	-
1981	2985	950	-	-	-	$59,227
1986	2987	990	$43,688	-	6,368	$87,218
1987	3101[2]	970	-	38,173	-	$113,825
1988	3101	980	-	39,047	11,808	$130,565
1989	3101	1000	-	35,970	9,128	$141,290
1990	3101	1000	-	41,672	11,959	$123,398
1991	3101	1020	$46,949	40,695	11,323	$130,149
1992	3101	1020	$46,867	36,293	11,372	$142,182
1993	3101	1030	$46,828	35,435	10,506	$129,927
1994	3101	1030	$46,181	37,551	11,427	$158,511
1995	3101	1040	$46,406	47,270	14,267	$189,215
1996	3101	N/A	$48,710	48,430	15,238	$214,234
1997	3101	N/A	$50,094	48,167	18,056	$259,100
Total Growth 1951-1986	**82.2%**	**22.2%**	-	-	-	-
Total Growth 1987-1997	**3.8%**	**5.1%**	**14.7%**	**26.1%**	**184%**	**197%**

Source: Victorian Year Book, 1997, ABS Cat. No. 5220-21 Vic, Victorian Taxi Directorate, Tourism Victoria
Notes: (1) Data is adjusted to real, using CPI (Melbourne) 1997 average prices
(2) The years between 1987-93 are unknown and the 1987 figure is assumed the same at 1993.

The data can only be regarded as providing partial indicators of taxi-cab demand. We agree with the VTA that licences per head are not a good measure of demand, although this is a commonly used indicator. There will be many factors that will affect the intensity of demand given population size. Growth in licences, however, lags behind all important indicators of demand for taxi-cabs, including household disposable incomes.[38] As the following discussion shows, however, taxi-cab licence values are not determined by demand alone.

[38] Although if taxi-cabs are an inferior good then we could expect this result.

Box 4.1 Economic impact of the issuing of 100 HOV licences

The Minister for Roads and Ports recently announced the issuing of 100 HOV licences. This licence release was designed to reduce waiting times for taxi-cabs during peak periods and major events. However, the licence conditions are restrictive, they protect existing licences from competition and go beyond merely ensuring adequate peak period supply. For example:

- licences cannot be transferred or assigned for 10 years;
- the owner must be an individual (not a taxi-cab company);
- drivers must comply with depot directions;
- special conditions apply to compulsory hours of operation (designated peak periods), including a restriction to limit pick-up to within 7km of Melbourne GPO and a restriction on trips to the airport (with direction from, or consent of, depot).

In addition, the types of applicants and conditions of the licence have been restricted. An applicant must have held a driver's certificate for five years and have never owned a taxi-cab licence.

While we support the objective of this move to ensure better availability of high occupancy vehicles at peak times, we have some significant concerns with the way the objective is being achieved:

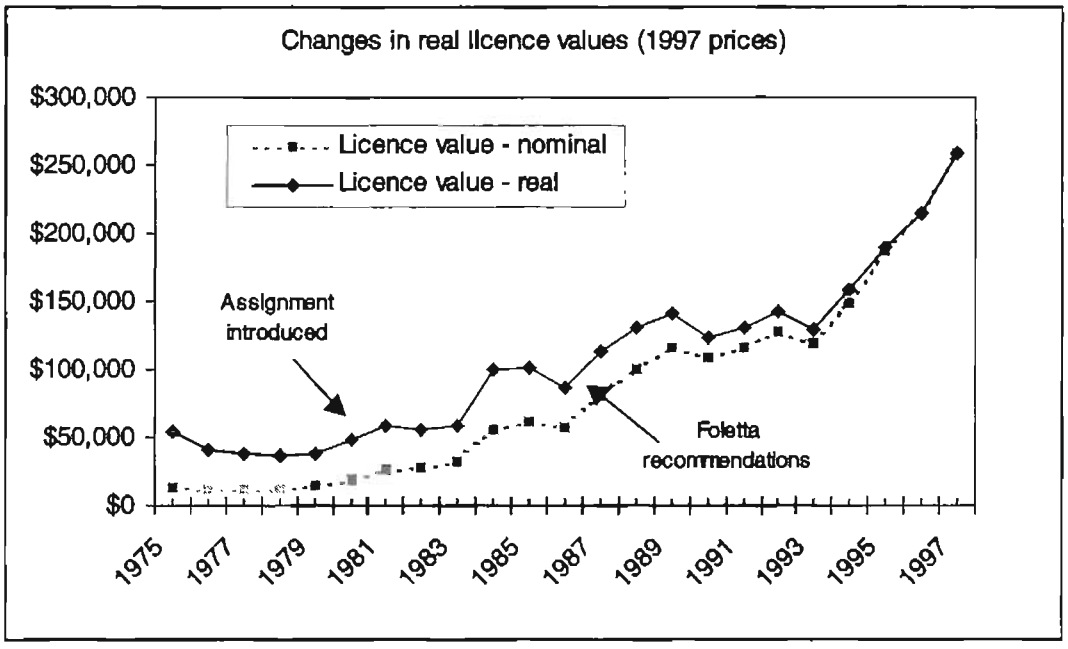
- A major concern with the issuing of these licences is the regulatory 'spiral' that it seems to be encouraging. Ultimately, the more conditions that are placed on licences the more enforcement is required and the higher are the costs from distorting market incentives. The issuing of additional licences just to cover peak period demand is an inefficient and unnecessarily complex means to overcome problems of availability. A better "solution" to having more taxi-cabs on the road at peak times is to increase the available supply of taxi-cabs generally and encourage operators on to the road by allowing higher fares at peak times. This would require less regulation, be effectively targeted and ensure that those purchasing taxi-cab services more accurately pay the costs of their service.[39]
- By preventing transfer or assignment for 10 years, these conditions minimise the impact of the new licences on the value of existing licences. It affects the supply of taxi-cab services (and thus returns to taxi-cab operators), but it does not affect the supply of licences on the transfer market in the medium term. Hence we would expect a limited effect on the price paid for licences.
- Limiting the sale of licences to drivers with a certain amount of experience has been seen as a means of 'rewarding' drivers for long service in the industry. Not selling at market prices imposes additional efficiency costs because the licences do not go to those who most highly value them. A more direct way to reward drivers would be to ensure they received appropriate remuneration and employment conditions.

[39] This is the 'peak user' principle – every time a taxi-cab is taken it increases waiting times and imposes costs on other potential consumers. An efficient solution is to ensure that consumers bear the costs of higher waiting times as well as the direct costs of the trip.

- Introducing "degraded" licences (including all types of 'peak period' licences) is likely to create significant pressure on government to 'upgrade' the licences to full Metro taxi-cab plates during subsequent periods.[40] Operators claim that they cannot make enough money to survive on a restricted basis (which may be true), so they invariably clamour for unrestricted licences which would allow them to work harder (as well, of course, as giving them large windfall gains).

Figure 4.1 emphasises that nominal licence values have increased substantially over the last 20 years. Real values (nominal values adjusted by the Consumer Price Index) of licences have also risen sharply, particularly in the periods 1983-89 and 1993-98.

Figure 4.1 Real and nominal licence values, Metropolitan taxi-cabs, 1989/90 prices



Source: Victorian Taxi Directorate and Australian Bureau of Statistics, *Consumer Price Index*, 6401.0

These figures are based on a reasonable turnover (transfers) of licences – in 1997/98 there were 240 transfers, and in the financial year to date, there have been 178 transfers.[41] This effectively means that there is little chance of the licence values being artificially inflated as a result of a "thin" market or of speculative trading of licences. We see no reason why the market for taxi-cab licence transfers would not be reasonably efficient overall although it is possible that some buyers of licences are not fully informed as to potential profitability.

[40] Submissions were received to this review requesting an upgrading of M50 licences to full Metro taxi-cab licences.

[41] Victorian Taxi Directorate communication.

Thus, if returns to licences are not commensurate with those available to investors elsewhere (e.g. putting the money in the bank), then licences will (and are) being sold by operators.

It is more difficult to estimate a current average value of country licences. Often trading is quite thin and the last sale may not be representative of a normal price. However, examples of recent sales (1998) in country areas are shown in Table 4.2. Our calculations suggest a weighted average value for country licences of approximately $185,000. One country depot indicated that it attempted to restrain transfer values by not approving membership transfers if the licence transfer values were considered excessive.

Table 4.2 Taxi Licence values in selected country areas, 1998

Country area	Licence values	Number of taxi-cabs
Dandenong	$260,000-265,000	70
Bendigo	$210,000	42
Geelong	$160-168,000	122
Robinvale	$73,000	2
Yarra Valley	$100,000	
Wangaratta	$155,000	9
Echuca	$160,000	10
Anglesea	$160,000	1
Peninsula	$180,000	
Ballarat	$200-230,000	54
Yarrawonga	$60,000	3

Source: Victorian Taxi Directorate

Licence values are an issue also for hire cars, which are subject to restrictive licensing. Evidence presented to the Administrative Appeals Tribunal recently suggests that Metropolitan hire-car licences are being transferred for between $80,000 and $90,000, which has increased from only $20,000 in 1995.[42]

Licence values arise because of restrictions on licence availability imposed by Government. If such a restriction was desirable, a point discussed later in the report, it would be preferable from the community's perspective for the Government to capture the increasing value of licences, not private operators. The Government could do this by charging annual licence fees reflecting market value and not permitting licences to be transferable.

[42] Administrative Appeals Tribunal (Victoria), *Caminiti v Victorian Taxi Directorate* (1997/17817).

4.4 Assignments

The relationship between drivers, licence owners, assignors/assignees, and fleet operators can be complicated. In simple terms, a licence attaches to a vehicle, as well as to the holder, and a driver's certificate regulates drivers. However, the actual operation is complicated by:

- provisions that allow 'assignment' of licences by assignors to assignees;
- the 'leasing' of licences by assignees or licence owners to drivers; and
- the operation of a standard lease agreement between the licence owner or assignee and the driver.

An assignment is effectively a process by which control of operation of a taxi-cab licence is ceded to another party, who may pay a regular monthly fee (currently approximately $1,800-$2,000 in Metropolitan areas) for that right. Assignments are the cause of much debate in the taxi-cab industry. Assignments were introduced in 1981, although they were not widely available until after the recommendations of the Foletta report were enacted in 1987. In part, the increasing value of the licence can be attributed to its transferability through both sale and assignment. Many submissions addressed the role of assignees and assignment:

> "It is important that the Government understands that the taxi-cab industry at present is divided into two opposing camps, that of the taxi-cab operator assignee and that of the licence holder assignor...Taxi licence values will continue to soar if assignments are allowed to continue, simply because the licence owner is not exposed to the true operating costs of the industry."[43]

> "My belief is that the major cause in the increase of taxi-cab licence prices to the levels we are experiencing now is driven by financial investors (who assign licences) not by the earning capacity of operating a taxi-cab."[44]

Many submissions also favoured the re-regulation of assignments; particularly, that the requirement to have driven a taxi-cab for the previous six months be reinstated.[45] In our view, however, assignments are likely to have increased productivity (in terms of lowering non-capital costs of operation) and efficiency within the industry. The simple fact is that an assignee values the licence more than the holder of the licence does – because an assignee thinks he or she can make money above the costs of assignment. If this is not true, and the demand for assignments falls, then assignment prices will start to fall. While outside investors are not likely to have the knowledge that operators of taxi-cabs have, it is evident that they would leave the industry if returns from the taxi-cab licence were not sufficient to keep them there. We discuss the effect of assignment further in section 4.5.1 below.

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[43] Submission of Mr Steven Tintas, p. 2.

[44] Submission of Mr Tom Groves, p. 6.

[45] See submissions of Mr Steven Tintas, Mr Tom Groves, Taxi Drivers Association of Victoria.

4.5 Profits

Details of depot and industry profitability were requested from the VTA but not provided to us.

Taxi-cab revenue comes from fares which, as noted above, are regulated by the Victorian Taxi Directorate. The Victorian Taxi Directorate has changed the way in which it sets taxi-cab fares. We understand that prior to 1997 the Victorian Taxi Directorate negotiated with the VTA over taxi-cab fares (which used a cost model to estimate the effect of changing input prices on taxi-cab owners). From 1997 the Victorian Taxi Directorate indicated it would adjust fares annually in accordance with the Melbourne transport costs component of the CPI, taking effect from the first Sunday in July. We understand, however, that the Victorian Taxi Directorate did not adjust fares in 1998 because there was a small fall in the CPI.

The current fare structure is as follows:

Flagfall:	**$2.60** when meter is started
Distance:	**$0.96** per kilometre
Time:	**$0.33** per minute if speed below 21 kph
Extras	
Phone booking:	**$1.00**
Late night surcharge:	**$1.00** ($1.50 country)

One might expect, given the large increases in the value of plates noted earlier, that fares would have risen rapidly over the past few years. However, this is not the case, as shown by Table 4.1.

Table 4.1 Changes in prices for Victorian taxi-cabs 1981-1998

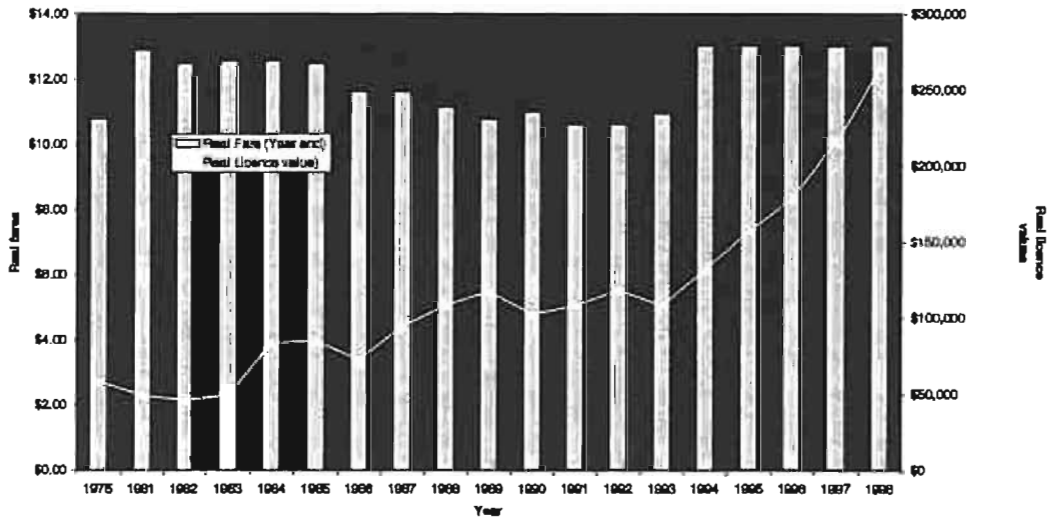
Tariff at:	Flagfall	Distance (c/km)	Time detention rate (c/min)	Booking fee
19/07/1981	$1.00	41.6	20	$ 0.30
29/09/1982	$1.00	45.5	21.7	$ 0.30
4/12/1983	$1.00	51.8	24.67	$ 0.30
27/10/1985	$1.10	53.1	25.7	$ 0.30
21/12/1986	$1.70	53.9	25.6	$ 0.30
6/03/1988	$1.90	56	25.6	$ 0.60
27/11/1988	$2.00	56.5	27.8	$ 0.60
4/06/1989	$2.20	57.5	29.8	$ 0.60
1/06/1990	$2.50	59.5	30.8	$ 0.60
22/12/1990	$2.60	61.7	31.9	$ 0.60
29/11/1991	$2.60	61.7	31.9	$ 0.60
28/02/1993	$2.60	68	32	$ 0.60
10/09/1994	$2.60	89	32	$ 1.00
6/07/1997	$2.60	96	33	$ 1.00

Source: Victorian Taxi Directorate

Notes: (1) Table uses "Tariff 1" figures - the basic daytime fare prior to the introduction of a single basic fare (with a night surcharge), and is without booking charges.

A series of real taxi-cab fares was constructed using (industry-supplied) averages of an 9.1 km trip with 3 minutes of waiting time. Only 'tariff one' figures are used (this was the basic fare prior to the elimination of different tariffs in 1994). In real terms, taxi-cab fares have remained relatively constant over the last 20 years. Figure 4.1 suggests that while real prices (nominal prices adjusted for inflation with base year 1998=100) fell until the early 1990s, a rise in mid-1994 was enough to push real fares slightly higher than they were in 1981. We understand that, in part, this rise was a 'trade off' with taxi-cab owners to ensure reforms (involving higher costs) of the taxi-cab industry were accepted.

Figure 4.1 Real taxi-cab fares (1998 dollars) and licence values



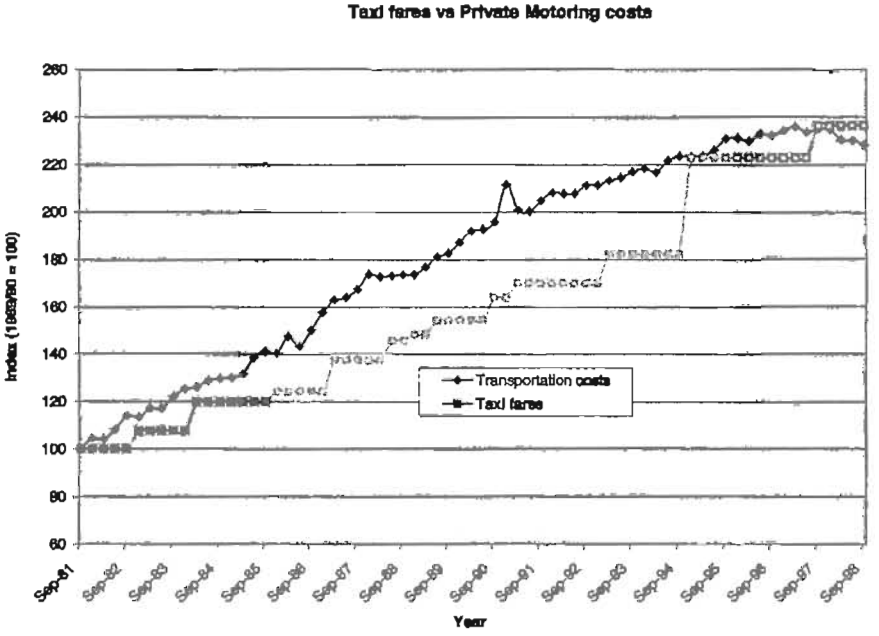
Source: Victorian Taxi Directorate, Australian Bureau of Statistics *Consumer Price Index*, 6401.0 , KPMG

We also examined changes in industry input prices to determine whether this may have affected profitability and hence licence values. The main running costs for taxi-cab drivers include:

- the price of fuel (LPG);
- insurance and repair costs;
- car prices; and
- vehicle servicing.

The ABS collects information on the costs of transportation for the calculation of the Consumer Price Index. This includes sub-indices on car prices, petrol prices (not LPG) and the price of insurance, servicing and repair of vehicles. Comparing the Melbourne Transportation Index to an index of taxi-cab fares in recent years (Figure 4.2) illustrates that the costs have not increased to any extent since 1995, but fares did rise again in 1997. While it can be seen that in the years 1980-89 fares rose slower than costs, in recent years the trend has clearly favoured higher growth in fares.

Figure 4.2 Taxi fares and private motoring costs



Source: Victorian Taxi Directorate and ABS, Components of the CPI, 6401.0

4.5.1 The impact of profits on licence values

In theory, the market value of a taxi-cab licence should equal the present value of expected future profits associated with holding the taxi-cab licence.[46] High and increasing licence values would therefore ordinarily indicate the presence of an economic (scarcity) rent – basically, that the high licence values are consistent with an ability to earn high profits in the future. The market value of a taxi-cab licence will depend on a number of different variables including the number of licences issued, the fare level, the expected cost of operating a taxi-cab and the regulatory environment in which taxi-cabs operate.[47] The VTA, however, suggested that:

> "There is nothing in (Table 4.1) that indicates that licence values should be increasing in the late 1990's."[48]

[46] See Arblaster (1979), An Economic Analysis of Regulation of the Taxi Industry incorporating an Empirical Study of the Melbourne Taxi Market, M. Ec. Thesis, Monash University, p. 42 for the rationale leading to this result.

[47] *ibid., p.* 143.

[48] Submission of VTA, p. 9.

We do not accept this view and note that there are two important supply-side effects that have influenced the value of licences:

- the removal of regulations which prevented the assignment of licences to someone else; and

- the improving productivity from better communications networks.

The effect of the widespread introduction of assignment in 1987 has been to act as a "productivity shock" – taxi-cabs are being worked harder (driving more paid and unpaid kilometres) and more professionally (more fleet operators) than has occurred in the past (when there were more single owner-drivers). This in turn has increased pressure on owner-drivers to work their own cars harder (through leasing to other drivers) to make profits. This is likely to have had the result of reducing costs – as such it has been an efficiency-enhancing measure – as was recognised in the Foletta Report which recommended the opening up of assignments. Assignments fundamentally allow a person to transfer control of an asset to someone who values that asset more – because they can operate that licence more efficiently (at lower cost) and make greater profits than the owner of the licence. Hence, while a move to restrict assignments would probably reduce licence values, it would be a backward step in the sense that it would discourage efficient utilisation and operation of taxi-cabs.[49] Again we return to the notion that licence values themselves are not the problem – licence values would fall as a result of costs increasing rather than prices falling, as is desired, but they are a symptom of the underlying problem.

The impact of improved communications, such as the move to computerised dispatch and subsequently Global Positioning Systems (GPS), is evident in vehicle utilisation data, which suggests that for the industry as a whole the ratio between paid and unpaid kilometres has improved from 48 per cent to 58 per cent in the last 20 years (see Table 4.1). An increase in utilisation would have the effect of decreasing costs (assuming other factors remain constant) because the variable and fixed costs of the vehicle would be spread over more fares.[50] For example, an increase in utilisation from 60 paid kilometres to 70 (for a 100 kilometre shift) would allow the 100 kilometres of running costs to be spread over 70 kilometres worth of fares rather than 60. Table 4.1 shows an (illustrative) example of how this impact may be felt:

[49] Frankena and Paulter (1983, p. 109) note that a regulatory change that increases the price of medallions (such as the opening up of assignments) does not necessarily increase the welfare loss due to regulation. The losses without assignment are just implicitly larger.

[50] Note that it also might imply that average waiting-times might rise. Insufficient data is available to reach any conclusion on this point.

Table 4.1 The impact of higher vehicle utilisation on costs

	Case (a)	Case (b)
Vehicle utilisation ratio	**48%**	**58%**
Kilometres driven per day (two shifts)	330	330
Costs of shift (e.g. comprising of variable costs such as petrol, fixed costs such as depreciation, return on licence fee, etc.)	$170	$170
Number of paid kilometres	158.4	191.4
For operator to *break even*, must recover costs per kilometre equal to...	$1.073	$0.888
Therefore, average 10km trip must recover...	$10.73	$8.88

Source: KPMG estimates based on VTA submission, other confidential sources

This example emphasises that productivity gains of enhanced networks could be reflected in a fall in costs for taxi-cab operators, particularly those using their taxi-cabs more intensively such as fleet operators. We consider that in conjunction with these cost influences, other factors such as low petroleum and LPG prices, the high level of tourist demand growth (and the airport market) have contributed significantly to the increase in profitability of taxi-cab operation in recent years. While this brief analysis has illustrated that taxi-cab operators are likely to have benefited from cost reductions in the previous few years, it is highly likely that rising assignment fees have captured much of these gains. Licence values reflect the assignment income that can be recovered from operators in the industry.

4.6 Availability

The quality of service provided by the taxi-cab industry is defined by variables such as safety, comfort, driver knowledge, cleanliness and customer availability. Regulations have been introduced in recent times to improve the service quality of Victoria's taxi-cabs, such as requirements for driver uniforms, yellow cabs and air-conditioning. There has been little regulation directly affecting availability or waiting times – although depots are required to provide "24-hour" coverage as part of taxi-cab licence conditions.

Waiting times are influenced by a number of variables, such as the number of taxi-cabs on the road, the preferences of taxi-cab-drivers (e.g. to avoid certain venues), the efficiency of the depot booking system (that aligns taxi-cabs with requests), and other non-industry related factors such as weather, road conditions, etc.

The VTA gave some statistical evidence that:

> "On average, it took 2.2 minutes for callers to get through to a telephonist after the call had been answered by the computerised telephone system. The telephonists were given a rating of good to very good in 86% of cases. The median time between making a booking and a taxi-cab arriving was 7.5 minutes for a taxi-cab to arrive, but in 44% of cases the taxi-cab arrived within 5 minutes and another 24% took between 5 and 10 minutes."

and that:

> "In one depot alone, Black Cabs Combined, there are already signs of dramatic improvement consequent upon procedural redesign in October (1998)...In September 1998, 65% of the telephone bookings received by Black Cabs Combined resulted in the customer being collected by a taxi-cab in less that 10 minutes on average. In the 1999 first quarter to February 16, 82% of customers were provided with a taxi-cab within 10 minutes of making their request."[51]

However, the full distributions of these samples were not made available to us and it is not clear how waiting times vary during certain times of the week.

From anecdotal evidence it would be fair to say that the taxi-cab industry receives criticism in relation to the availability of taxi-cabs – particularly at peak times or after major sporting and cultural events. Indeed, it was for this purpose that 100 new taxi-cab licences are being issued for the Metropolitan region.[52]

Submissions confirmed these views, with many submissions addressing a "possible solution to the existing problem of "taxi-cab availability" at peak periods (without deregulation)"[53]:

> "It is a well known fact that TAXI OPERATORS in capital cities throughout Australia have a major problem in delivering a level of service that is acceptable to the consumer"[54]

> "The major problem of the Victorian Taxi Industry is the one of an "ON-GOING TAXI SHORTAGE".[55]

> "We are concerned about our industry's inability to service the public demand during peak times and the inefficient utilisation of our resources."[56]

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[51] Submission of VTA, p. 28.

[52] See the press release by the Victorian Minister for Roads and Ports, Mr Geoff Craige on 7/12/1998, "The Government is serious about reducing waiting times for taxi-cabs during peak periods and major events."

[53] Submission from Frank Hart, Martin Meter.

[54] Submission from Frank Hart, Martin Meter.

[55] Submission commercial in confidence.

[56] Submission from SANTED Group.

Although one taxi-cab driver felt that:

> "As to perceived gripes about shortage of taxi-cabs at peak times; I reckon it only obtains to Friday p.m., Saturday evening, New Years Eve – all night, Christmas Day 10.30a.m. to 2.00p.m., and a few other times such as Grand Prix event conclusions."[57]

Comments were also received to the effect that peak period problems would be reduced if more public transport was available.

The difficulties of disabled people in accessing M50 taxi-cabs was also addressed in submissions. Anecdotal evidence was presented that at certain times there were great difficulties in securing an appropriate M50 vehicle.[58] [59] One submission felt that the availability problems experienced by disabled people were a result of drivers who were poorly trained or chasing more profitable business at the airport.[60]

Although consumer surveys in the Metropolitan area have been limited, the Brian Sweeney & Associates report[61] on taxi-cab services in country areas provides some interesting data in this regard. It emphasises the notion that taxi-cabs, while relatively plentiful during the day, can be difficult to hire at night. This is shown by Table 4.1 which indicates the time profile for those respondents who waited more than 10-15 minutes for a taxi-cab:

[57] Submission of Mr John Prideaux.

[58] Submission of Mr Phil Rowan and consultations with the Accessible Transport Consultative Committee.

[59] The Review Team itself had difficulty contacting the Central Booking Service so we assume customers may do likewise.

[60] *ibid.*

[61] Three similar reports were produced by Brian Sweeney & Associates: Sunraysia August 1998, Bendigo September 1998, and the Mornington Peninsula April 1998, and a qualitative report on customer attitudes was produced in association with PPK.

Table 4.1 Time of Day/Night respondents waited more than 10/15 minutes for a taxi-cab

Time	Total	Zone	
		Westernport	Port Phillip
	n = 98	n = 40 %	n = 58 %
12.00am – 6.00 am	52	50	53
9.00pm – midnight	14	20	10
6.00pm – 9.00pm	12	13	12
3.00pm – 6.00pm	7	10	5
12.00pm – 3.00pm	7	3	10
9.00am – midday	7	5	9

Source: Brian Sweeney & Associates

The Brian Sweeney and PPK reports point to a considerable difference in service and availability between daytime and night-time, and weekday and weekend periods. This applies in all areas of Victoria examined, although there is more data available in certain areas.

An interesting feature of the work undertaken is the fleet utilisation data. Table 4.2 appears to show that taxi-cab operation is, not surprisingly, highest when demand is also high – particularly on Saturday nights. This casts doubt on the claim that the reason for lower availability at certain times is difficulty in attracting drivers.

Table 4.2 Proportion of taxi-cabs in operation, percentage

	Mornington Peninsula		Bendigo		Sunraysia	
Day	12-3am %	9pm-mid %	12-3am %	9pm-mid %	12-3am %	9pm-mid %
Sunday	70	35	88	42	69	54
Monday	23	47	14	39	28	70
Tuesday	15	47	13	44	24	70
Wednesday	18	53	18	68	30	89
Thursday	33	70	26	83	53	91
Friday	63	97	78	87	69	96
Saturday	90	95	84	91	93	94

Source: Brian Sweeney & Associates

These results are consistent with data we were shown by one of the major depots operating in the Metropolitan area. The general conclusion seems to be that at most times the

performance of the taxi-cab companies is satisfactory, although at peak times the supply restriction on the total number of taxi-cabs hampers the ability of the industry to service demand.

This conclusion can only be tentative, however, as the Victorian Taxi Directorate does not collect up to date detailed waiting time data for the Metropolitan area, despite this being a key performance measure.

It is likely to be the case that in an efficient taxi-cab market waiting times for customers will vary according to the level of demand and available supply. It would also not be possible for taxi-cabs alone to meet the peak demands associated with some events. The issue is whether a more flexible licensing system which allowed supply to adjust more easily to demand, or which allowed fares to adjust to better ration supply, would give better outcomes for customers.

4.7 Service differentiation and innovation

Service differentiation is an important part of competitive conduct. In the taxi-cab industry this has been restricted by the requirements for minimum size, standard-appearance vehicles and the inability to charge higher or lower fares. In addition, shared ride vehicles (jitneys) are also not feasible under current regulatory arrangements.

However, the VTA submission points to gains made by the industry as a response to the notion that the industry stifles efficiency and innovation:

> "...there has been a considerable amount of innovation in Victoria's taxi-cab sector within the current regulatory structure (p.27)...Victoria's regulated taxi-cab sector can justly claim to be a world leader in the adaptation of technology to taxi-cab service delivery...(p.28)".

The VTA also presented evidence that showed the productivity gains in recent years have been substantial, particularly for large depots (Silver Top Taxis and Black Cabs Combined). The benefits were perceived to flow to consumers through quicker response times to calls, faster dispatching and efficient area matching of taxi-cabs to customers.

Overseas evidence, as summarised in section 10.2, suggests that service differentiation has not been a particularly important feature of deregulated markets and that new services (e.g. shared ride) have not appeared. However, the operation of hire cars in the U.K. suggests that lower quality services can co-exist with high quality services.

While we accept that there has been substantial innovation in Victoria's regulated taxi-cab industry, it is much less clear that consumers have fully shared in the benefits. We see no reason why a less regulated, more competitive market may not have also resulted in this level of innovation and more. We also make the point that gains from service innovation

(such as the introduction of computerised dispatch) are more likely to be passed on to consumers in a competitive environment.

4.8 Impact on hire cars

The primary effect of regulation has been to limit hire cars and other SCPVs to market segments that are relatively insensitive to price, by offering a luxury service on standard routes. The Victorian Hire Car Association commented:

> "Hire cars in a marketing sense differentiate their services from those of taxi-cabs on the basis of higher vehicle standards and a more personalised, punctual and private service...The product is a luxury, or 'value-added' version of that which is provided by taxi-cabs, and hence is more expensive to purchase."[62]

There are 361 hire car businesses operating in Victoria, with 315 of them in Melbourne. They are mostly small businesses, each operating on average one or two cars.[63]

In recent years there have been a number of important trends noted by the hire car vehicle sector:

- an increased number of operators;
- competition from improved standards within the taxi-cab sector;
- new technology (such as mobile phones and computer-aided dispatch) which has aided taxi-cabs to compete with hire cars;
- increasing competition from self-drive hire cars; and
- since 1993, new competition from the introduction of RHVs and the less regulated courtesy cars (which are not classified as commercial passenger vehicles for the purposes of the Transport Act).[64]

While noting these influences, it is apparent that licence values for Metropolitan hire cars have risen from approximately $20,000 in 1995 to $90,000 in 1998.[65] A consultant's report commissioned for the purposes of an application hearing in the Administrative Appeals Tribunal noted that:

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[62] Submission of Victorian Hire Car Association, p. 14.

[63] Submission of Victorian Hire Car Association, p. 13.

[64] Submission of Victorian Hire Car Association, p. 14.

[65] Administrative Appeals Tribunal (Victoria), *Caminiti v Victorian Taxi Directorate* (1997/17817), p.4.

> "This report demonstrates that there is a clear need to review the regulatory approach currently employed in relation to the chauffeur driven hire car industry. In particular, there is a clear need to let market forces operate more freely than in the past. Unduly strict controls on the growth of the industry has had the effect of stifling initiative, protecting inefficient service operations, and yielding a sub-optimal pattern of service delivery. It also has had the effect of producing windfall gains to existing operators by bidding up the value of MH vehicle licences."[66]

The Victorian Hire Car Association notes that areas of competitive influence with taxi-cabs will be greater where pre-booking has a larger share of the overall passenger service markets. For example, in country towns and remote areas pre-booking can account for 80-100 per cent of work, which effectively means that substitution between the two services is high.[67]

[66] Report of Dr Jennifer Morris, "Chauffeur Driven Hire Car Services in Melbourne" March 1998, referred to in AAT, *Caminiti v Victorian Taxi Directorate (1997/17817)*, p.4.

[67] Submission of Victorian Hire Car Association, p. 15.

5 Objectives of taxi-cab and commercial passenger vehicle legislation

5.1 Historical context

Regulation of taxi-cabs has been in place for as long as taxi-cabs have operated in Victoria.

The early statutes were driven primarily by concerns about public safety. For example, the earliest statute, the *Licensed Carriages Act 1835* had the following preamble:

> "Whereas much inconvenience and danger have arisen to persons travelling by stage carriers conveying passengers for hire in New South Wales, by reason of the excessive number of passengers they sometimes carry, and the want of proper regulations in such and other respects; and it is therefore expedient that such stage carriers should be regulated in the manner hereinafter mentioned."[68]

Later legislation was aimed at "punishing criminally Drivers of Stage Coaches and Carriages for accidents occasioned by their wilful misconduct."[69]

The growing number of hackney coaches encouraged the Melbourne City Council to seek further powers to regulate the industry. In 1850, the Council was given powers:

> "to make by-laws for the licensing and regulating Hackney Carriages plying for hire within the City of Melbourne and its vicinity and for regulating the conduct of the Owners and Drivers thereof".[70]

A hackney carriage was defined to mean "any coach, car, cabriolet, or other vehicle plying, kept, or let out for hire" within the city and eight miles of the limits of the city. But the by-laws did not apply to carriages:

> "let to hire only when previously ordered or bespoken at the stables or residences of their owners, and which shall never be permitted to ply for hire in any street or place off the premises of their respective owners, or to the owners or drivers of such carriages."

In the terms of this report, the regulation only covered the cruising market and not the booking market.

The legislation was extended to cover Geelong in 1863[71]. Consolidations to the law relating to licensed carriages occurred in 1864[72], 1890[73], 1915[74] and 1929[75] though little change

[68] 6 William IV., No. 2, 1835.

[69] 13 Victoria, No. 5, 1849.

[70] Licensed Carriages (Melbourne), 14 Victoria, No. 3, 1850.

[71] Victoria, Melbourne and Geelong Corporations Acts Amendment, 1863.

occurred over these years. In Ballarat and Bendigo the local councils regulated carriages under Local Government Act powers.

Concerns about the "transport problem" and a desire to achieve greater coordination of transport regulation led to new legislation affecting commercial passenger vehicles and the establishment of the Transport Regulation Board (TRB) in 1933. Certain matters had to be taken into account by the Board before licences were granted. These still remain in the same form in the Transport Act (s.143). A significant aspect of government policy at the time was to protect the railways from competition from road transport, especially in the freight area.

Taxi-cabs and hire cars were not brought under the control of the TRB until 1952, following further legislation, which also established a Ministry of Transport. Local Council regulation ceased from that time. Subsequently the Road Traffic Authority (from 1983), Roads Corporation (from 1989) and the Department of Infrastructure (from 1994) have had regulatory responsibility for the industry. The Victorian Taxi Directorate operates as a Branch of the Department.

A number of earlier studies and reports provide insight into the development and rationale for the current regulation in Victoria affecting taxi-cabs and other small commercial vehicles. Williams[76] highlights, in particular, the reasons for the extension of economic regulation of the industry. Maximum fare regulation operated as early as 1850, but up to 1932 licences were issued 'as of right'. Many owner-drivers entered the industry, as did some larger taxi-cab companies. Yellow Cabs successful entry in 1924 was associated with the use of taximeters in its vehicles and its discounting of fares. Taximeters were made mandatory for all vehicles the following year. Increasing competition was also associated with the move towards set fares on an average basis and to drop charges for 'dead running' to get to a job.

The Depression attracted owner-drivers to the industry who worked long hours. Vigorous competition resulted in the larger companies moving employed drivers from weekly wages to leasing arrangements. The larger companies and the drivers' union lobbied for licence numbers to be restricted in response to the highly competitive environment. This plea was eventually accepted by the Council and by the Government in 1932. In following years licence numbers were cut and set fares replaced maximum fares, again at the behest of the incumbent operators. Also hire cars, which had flourished since taxi-cab numbers had been limited, were brought under control in 1939 and their numbers cut.

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[72] Victoria, Licensed Carriages Statute, 1864.

[73] Victoria, Carriages Act 1890.

[74] Victoria, Carriages Act 1915.

[75] Victoria, Carriages Act 1928.

[76] D. V. Williams, Regulation of Taxis: The Victorian Case, M.E. Thesis, Latrobe University, December 1978.

This experience indicates that historically economic regulation of taxi-cabs and hire cars was driven by a desire to restrict competition in the interests of incumbent operators and drivers, rather than as a response to public concerns about safety or other public interest matters.

Interestingly, it also provides a different perspective to the claim made by the VTA that taxi-cabs need to be protected from competition in order to fulfil their common carrier status. In fact, we have found no explicit reference to support the proposition that such status was a deliberate intent of Government. Prior to the regulation of hire car numbers, the booking market flourished and filled the gaps in the cruising market. Average fare setting (and requirements to meet customer requests for service on demand) were not introduced to meet particular public policy requirements, but were initially outcomes of the competitive process and later captives of the regulatory process.

Since the adoption of restricted entry, there have been long periods when licence numbers have remained steady. In the early 1940s, war time controls were partly responsible for this. Inquiries held in 1954 and 1963 resulted in the release of additional licences. More recently, in 1986, following the Foletta Inquiry, a further small increase in licences occurred. There have also been licences issued more recently covering vehicles for disabled passengers requiring wheel chair access.

A significant concern of regulators over time has been to ensure the ready availability of taxi-cab services throughout the Metropolitan area and especially on its fringes. Hire cars historically were significant providers of services in these latter areas. The TRB introduced zoning to the Metropolitan area to deal with the problem of lack of availability; hire car licences in outer zoned areas were converted to taxi-cab licences. The zones have with one exception now been removed.

Arblaster[77] examined in detail the operation of regulation in the industry between 1952-1978. She noted that the general aims and policies of the TRB in relation to the taxi-cab industry over this time were that the industry should earn a "reasonable" rate of return and provide an "adequate" service to the public. Her analysis especially highlighted the strong link between the regulation and the value placed on licences. Weaknesses in the fare setting methodology, which resulted in fares being set at an excessive level, coupled with restricted entry resulted in licences attaining very high values.

The Foletta Inquiry was the last major Government review of the taxi-cab industry in Victoria. This Inquiry was prompted by concerns about poor performance of the industry, especially in terms of availability and waiting times. It advocated a change in regulatory policy toward more open entry and greater reliance on industry self-regulation. Only minor change occurred.

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[77] M Arblaster, An Economic Analysis of Regulation of the Taxi Industry incorporating an Empirical Study of the Melbourne Taxi Market, M. Ec. Thesis, Monash University, 1979.

The essential elements of the economic regulation of the industry affecting fares, entry conditions and hire cars remain largely as they were when the TRB took over the role of regulator from the local councils.

5.1.1 Objectives

There are no explicit objectives relating to SCPVs in the Transport Act. However, in a broad sense, the objectives of the Department of Infrastructure (which are in the Act) provide a benchmark for the objectives of SCPV regulation. They are:

> (a) to improve the efficiency and effectiveness of transport facilities and networks to meet the needs of the community;
>
> (b) to ensure that a public transport system is provided in Victoria that is efficient, effective, safe and reliable and has due recognition for the needs and interests of the users of that system and the taxpayers of Victoria; and
>
> (c) to ensure the achievement of optimum overall transport outcomes by undertaking integrated transport planning and integrated transport system and service development linked to the overall planning strategies and other policies of the Government (s. 4(1)).”[78]

We could infer that the basic objectives of SCPV regulation are ensure that the industry provides the services that consumers demand safely and at minimum cost. The next question is to ask why this industry with no specific regulation would fail to achieve these outcomes. We therefore now discuss and assess market failures pertinent to the SCPV industry, before further commenting on the objectives of the legislation considered relevant for this review.

5.2 Market failures

As noted in the *Guidelines,* the presence of market failure serves as the principal rationale for government intervention in markets. A market failure is, broadly speaking, a situation where allowing allocation of resources through open and unrestricted competition will not lead to the best possible economic (efficiency) outcomes. A market failure might be reflected by under or over-production of various taxi-cab services, production of the wrong qualities of service, or unnecessarily high costs of producing a given output. A taxonomy of types of market failure is presented in Box 5.1.

[78] Submission of Victorian Hire Car Association, p. 17.

Box 5.1 Types of market failure

Externality

Where private decision-makers impose costs or benefits on others in the community which are not compensated. Externalities may cause markets to fail to produce efficient outcomes. An example of a positive externality might be the actions of a taxi-cab driver towards a passenger which bring benefits to the tourist industry (i.e. promote a positive image) which the tourist industry does not directly pay for. Air pollution, on the other hand, is often cited as a negative externality.

Information asymmetry

Occurs where buyers and sellers do not have similar information as to the exact nature of the good or service being exchanged. In such cases, the party with the superior information may exploit their advantageous position to the detriment of economic welfare. For example, if passengers are not well able to judge the characteristics of a taxi-cab ride before buying, the taxi-cab operator may cut quality and hence costs. In certain circumstances, information asymmetries can cause markets to produce inefficient outcomes.

Natural monopoly or monopoly power

A situation where it is cheaper for a single firm to supply the entire market demand. Competition will not lead to efficient outcomes in this circumstance. Taxi networks may be natural monopolies to the extent that one network may be able to provide dispatching services over the whole of Melbourne at minimum cost. The cost trade off from having multiple networks does not, however, seem high.

Public goods

Public goods are those goods or services that have two special characteristics that mean they are unlikely to be provided in markets. First, they do not diminish as more people use the good (non-rivalry in consumption) and second, it is impossible or infeasible to exclude non-payers from using the good. Such characteristics mean that market provision of the good is not possible.

The purpose of reviews of restrictions on competition is to identify whether the restrictions are necessary to achieve the objectives. It is not strictly necessary for the objective to be related to a market failure as there may be some social or environmental objectives that operate to override the economic efficiency objective, however, the restriction should address the objective in a direct and efficient manner.

There is a voluminous amount of Australian and international literature on perceived market failures (and reasons for intervention) in taxi-cab markets. It would be complex and unnecessary to discuss all of them. The VTA submission summarises some of the available literature. Our comments are largely confined to the significance of this material. The following section examines the market failures that are likely to occur in unregulated taxi-cab markets, and the types of interventions or restrictions we consider these market failures could justify.

5.2.1 Asymmetric information and bargaining issues

Consumers incur costs when determining what to buy and how much to buy. In relation to taxi-cabs, consumers would like information on what is a competitive price for the quality of service provided and who was charging competitive fares. These are known as transactions costs, which are incurred prior to or after actually making a transaction and add nothing to the service purchased. It is possible that monopoly pricing can prevail even in competitively structured markets if consumers incur high search cost. Suppliers undercutting on price would find that they may not attract more custom because it is costly for consumers to search for lower prices.[79] There is some evidence to suggest that if taxi-cabs were free to bargain over fares, consumers' and drivers' search costs in looking for lower fares and higher fares respectively are likely to be high. Even gauging the effect of different fare structures (e.g. different per km rate) can be difficult. This suggests that there is a potential role for government to enforce either information requirements on taxi-cabs identifying an unchangeable fixed price, or price ceiling; or in the event this is considered unenforceable, to mandate a fare ceiling.[80]

Another aspect of the informational type problem relates to the quality of taxi-cabs and drivers:

- While consumers are in a good position to judge the exterior and interior characteristics of a taxi-cab, they are in less of a position to judge the quality of the motor vehicle. In certain circumstances, this can result in what is known as 'destructive' competition – where consumers are unable to judge the quality of products and therefore keep it at acceptable levels, even where they have a wide range of suppliers to choose from.[81] It is possible (and likely) that this would lead to sub-optimal provision of vehicle quality. In other words, poor quality taxi-cabs (e.g. with poorer maintenance standards) would tend to under-cut and drive out the better quality taxi-cabs.

- Driver characteristics are difficult to judge before accepting a ride. At a basic level, it appears evident that this problem could be solved by ensuring that drivers are of a certain minimum standard, that they are competent drivers, knowledgeable of the areas they are expected to operate in and are medically fit to drive the vehicle. However there is strong evidence to suggest that requirements should go beyond this, to stop taxi-cab users being exposed to potentially dangerous drivers. Hence police checks of criminal records are considered an important part of regulation in most jurisdictions.

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[79] Diamond, P, (1996), "A model of price adjustment", *Journal of Economic Theory*, 3, pp. 156-68.

[80] A mandatory requirement to post a price may not be enough – assume that a taxi-cab company sets a very high maximum price but allows bargaining under this – the outcome may be similar to if there was no posted price.

[81] Kahn, A. (1988), *The Economics of Regulation: Principles and Institutions*, Vol II, p. 177. Note that Kahn also suggests "Even if there is a danger of unregulated competition producing an unwanted deterioration in the quality of service, it does not necessarily follow that direct restraints on entry and price competition are the proper remedy."

There are efficiency-related arguments, therefore, for quality regulation or for information disclosure (e.g. vehicle standards). It is unlikely that individual cabs or groups of cabs could overcome these basic informational problems solely by developing a reputation or by advertising quality characteristics. In any event there may be significant problems with having even a few (say) uninsured or unroadworthy cars, or having persons convicted of serious criminal offences driving.

5.2.2 Monopoly power (non-competitive behaviour)

A standard assumption of the competitive market model is that producers of services are price takers, that is, they have no discretion over the price set in the market. However, these conditions may not be met in situations where taxi-cab supply is limited (e.g. where there is one taxi-cab and 5 potential customers at a taxi-cab rank). If this is a common occurrence, this could allow the driver to set a fare above the competitive level. A public policy response to this problem might focus on either some form of fare restraint, or on attempting to engender more competition through enhancing the ability of taxi-cab drivers and passengers to bargain. This could potentially increase efficiency in the cruising and rank market segments. This is less likely to be a problem in the booking market, where a price could be negotiated prior to the taxi-cab arriving.

Other problems generated by monopoly power, particularly in cruising markets, have been examined by economists over the years and are discussed in Box 5.1.

Box 5.1 Economic theory and cruising taxi-cab markets

There has been a considerable economic debate in the last 30 years on competition in the taxi-cab industry and its viability. In large part the debate stems from the apparently simple paradox of taxi-cabs: there are a large number of consumers and suppliers of services, and low natural barriers to entry, but extensive regulation of fares and entry. This combined with high licence values, perceived to be based on high fares, has commonly led to calls for deregulation. Economists have used theoretical models to try to better understand the processes and behaviours unique to taxi-cab markets. These models incorporate features such as waiting time and non-price-taking behaviour.

The evolution of the debate in the 1970's is described in Williams (1979), and covers the basics of the early models of competition developed. Shreiber (1975) and Orr (1969) developed the first models of cruising taxi-cab markets in which prices are be too high (indeed, may not reach an equilibrium price) in a competitive situation. These results are driven by the notion that there are poor incentives for cruising taxi-cabs to compete away high prices. For example, at a rank the 'first in, first out' convention reduces competition, while in a hail situation when faced with high prices the consumer must weigh the effect of increased waiting time if he or she waits for the next taxi-cab. However, Shreiber's model assumes that taxi-cab operators cannot differentiate themselves or stand at ranks, which seems not to reflect current market operation, and that all operators are small. This casts doubt on the relevance of this model.

The findings of Telser (1978) and other exponents of "core theory" are also consistent with the notion that a competitive situation with fare bargaining is not consistent with efficiency criteria. Core theory emphasises the interactions between customers at the point of sale (e.g. a rank), and suggests that consumers cannot form stable co-operative 'coalitions' to purchase taxi-cab services – hence the core is 'empty', so that the market cannot achieve stability. Price and quantity fluctuate constantly. It can be argued that these models provide an 'in principle' case for fare regulation. These arguments do not, however, apply to the pre-booked market.

The VTA submission covers more recent developments in the theoretical literature in some detail. It discusses a model by Cairns and Liston-Heyes (1996) which identifies a framework using profit as a function of the number of rides, the number of taxi-cabs and the number of hours taxi-cabs operated. That is, it incorporates a number of key characteristics of taxi-cab markets as variables. It provides a case for a "second best" solution – however, it does not necessarily justify entry controls as the only means of ensuring such a solution. Increasing prices and the number of taxi-cabs is also acceptable if infra-marginal consumers[82] value low waiting times. Entry controls may be used to achieve an equilibrium, but they will generate positive profits – and licence values. Hence the justification for entry controls remains unresolved at a theoretical level.

Some commentators have noted that price competition at the 'point of sale' is not viable in taxi-cab markets.[83] The conditions which are said to prevent price competition include 'first in, first out' rules at ranks, the spatial organisation of the industry (meaning few cabs congregate at the same point), and the fact that consumers in a hail situation must incur costs of waiting for the next taxi-cab (which are unknown) if they are not happy with the first taxi-

[82] those consumers who are prepared to pay more than the market clearing price.

[83] See, in particular, Dempsey, P.S. (1996), "Taxi industry Regulation, Deregulation & Reregulation" and comments ascribed to other authors.

cab hailed. This does not provide justification for entry regulation. Indeed it could be said regulation has exacerbated these problems.

A common manifestation of the monopoly problem is the 'airport problem', where at certain times large groups of potential passengers can be subject to taxi-cabs operating under conditions of 'short run' monopoly. While it is relevant in any context where there is a severe mismatch of demand and supply, it is referred to as the 'airport problem' as the airport is where the problem most commonly manifests. The 'airport problem' has been extensively analysed in the literature. In part, it appears to be due partly to information problems (i.e. tourists arriving and not understanding the ruling price for taxi-cab travel) and in part to monopoly problems. Generally it seems that the most efficient way to correct for the market imperfections would be (a) to provide information of the costs of a taxi-cab trip at the airport or (b) to ensure that fares cannot be increased beyond a certain limit to take advantage of particular situations. Of course, there is a risk that these 'corrections' may prove less efficient than doing nothing – particularly, for example, if fare limits were set too high. Again it does not appear that entry restrictions are necessary to correct market failure, although other benefits generated from entry restrictions may justify this form of intervention. This is further discussed in Section 6.3.6.

5.2.3 Externalities

Externalities in taxi-cab markets are often said to arise in the following areas:

- in the decisions of taxi-cab operators to enter the industry, leading to 'excess entry' into the industry;
- in the effect of taxi-cabs on congestion and pollution;
- in the determination of waiting times;
- the impact of taxi-cabs on tourism; and
- in aspects of safety and insurance regulation.

The VTA argued that there is likely to be excess capacity of taxi-cabs in equilibrium:

> "We come back to the problem that operators, acting as individuals, do not take account of the externality involved in adding capacity. Too many cabs are on offer and equilibrium results with a sub-optimal number of driving hours."[84]

The basic idea seems to be that operators see that the marginal revenue obtainable in the industry is greater than their marginal cost, but operators do not account for the externality that adding their vehicle has on average waiting times, which increase for drivers of all cabs.

[84] *ibid.*, p. 39.

This results in lower productivity and 'destructive' competition between operators. We do not find this argument convincing:

- Waiting time has a cost to consumers – who are willing to pay to avoid it. Thus one could equally say that the externality in adding capacity involves a positive externality for consumers, for whom average waiting times *fall*. This may cause demand for taxi-cabs to increase. Unless we know the effect of lower waiting times on demand (the waiting time elasticity of demand), then it is not possible to conclude that restricting entry of taxi-cabs provides consumers with a benefit. One study from Sweden even suggested that following deregulation of entry in that country, the valuation of waiting time suggested by empirical research made "it more likely that consumers gained when waiting times decreased after deregulation and even that customers' gains exceeded taxi-cab driver losses."[85]

- Operators who realised that they were not meeting their marginal costs of operation may simply exit the industry if fares were regulated to an efficient level. We do agree that fares regulated at too high a price in combination with open entry leads to poor results – too many taxi-cabs waiting for too few fares. This is a problem of non-optimal regulation rather than market failure.[86]

- Restricting entry is likely to aggravate any perceived problem, as fixed costs of operation are higher where licence values are high (as they are in Victoria). This means that operators try to keep their vehicles on the road as long as possible, rather than adjusting the level of supply to match demand. If fixed costs were lower (as under an open entry system) then operators would not need to operate their vehicles as much. We could then expect a more flexible system that responded to peak demand by increasing supply and to slow periods by leaving vehicles off the road.

Congestion and pollution externalities are unlikely to prove a sufficient justification for entry regulation. Entry regulation is a very blunt and high cost means of counteracting these problems, and it is not clear why taxi-cabs should be singled out for special treatment in comparison to trucks and cars. Congestion is more likely to exist at ranks in high demand areas (e.g. the airport). These can be (and are) managed without resort to regulation[87] and would not appear to cause considerable costs, and also have a benefit – lower waiting times for consumers. Certainly there has been little evidence presented to this review that justifies

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[85] Burdett, K., and Folster, S (1994), "Analyzing the Effects of Taxi-cab Deregulation: A New Empirical Approach", Working Paper No. 410, The Industrial Institute for Economic and Social Research, p. 18.

[86] the 'first in, first out' rank system provides one reason why exit may not occur – because fares above costs can be obtained simply by waiting for long enough. If consumers were able to choose taxi-cabs then this would not be a problem.

[87] In New Zealand, the airport authorities manage congestion areas in an otherwise largely deregulated market – often by selling prime rank positions. See Morrison (1997), *op.cit.* Australian airports also manage taxi-cab traffic flows, but so far airport authorities have not been permitted to do this by setting access charges for taxi-cabs entering airport environments.

the specific form of regulation chosen (entry, fare and quality controls) to counteract these problems.

Taxi-cabs are critical to perceptions of tourists visiting Victoria. Poor service or inflated prices are likely to be detrimental to the economy of a city and state as a whole. Many parties, such as hotels, convention centres and restaurants rely on a relatively efficient and prevalent transport sector. This might provide a further rationale for quality and fare regulation.

As a final point, certain aspects of safety regulation could potentially be seen as a reaction to externality type issues. Vehicle standards and roadworthy inspections can prevent or reduce the risk of road accidents.

5.2.4 Other rationales for restrictions

5.2.4.1 Maintain average pricing

An implication of average pricing is that taxi-cabs do not, in general, set fares to cover the costs associated with each individual passenger trips; rather, they recover costs in total from average fares set for all trips. For example, a taxi-cab driver when called to a remote location cannot, under current Regulations, charge for his or her expenses in getting *to* the location, only the expenses *from* the time the meter starts. It is interesting to note that prior to the entry of Yellow Cabs in Melbourne in 1924 taxi-cabs did in fact set trip specific fares. Competition (the entry of Yellow Cabs) not regulation changed this.

The VTA submissions suggested that if entry controls are dropped but fare regulations are maintained then average pricing provisions in effect become problematic. There will be too many cabs chasing profitable fares with reductions in service in remote or poorer locations. Entry controls are therefore seen as necessary for uniform or universal service. However, even with limited entry there will still be a tendency for incumbent operators to service more profitable market segments and avoid "dead-running". Other regulations such as not allowing operators to reject passengers (except in special circumstances) are necessary to prevent this.

Average pricing may be seen as promoting some equity goals. It allows customers to travel for the same fare structure regardless of location or the cost of serving that passenger. It is not clear that it promotes 'equity' among members of the community, as it is commonly understood. There is little evidence to suggest that the beneficiaries of average pricing (e.g. those in less-dense areas or who catch taxi-cabs at certain times when the costs of serving them are higher) are disadvantaged. Hence it may not be as equitable as its proponents suggest. It does not accord with strict efficiency considerations, but as historical evidence suggests may arise in any event from competitive market operation.

5.2.5 Summary

We have seen that there are potential 'market failure' rationales for intervening in taxi-cab markets. Of course, this does not mean that the Government need intervene in all of these cases. However, certain types of intervention appear to have some theoretical basis:

- a requirement for limiting opportunistic fare increases, ensuring information is available about fares and possibly capping fares; and
- regulation of 'service quality' to minimise public and driver safety risks, including minimum standards for drivers and vehicle safety standards.

The VTA presented some rationales that indicated that restrictions on entry might be "second best" optimal. These arguments are based on the notion that because fare regulation may be desired to achieve certain policy goals, entry restrictions are needed to 'balance' these distortions. However, we are not convinced of the robustness of arguments that involve restriction of entry at either a theoretical or a practical level.

5.3 Conclusions

What objectives can therefore be inferred and are appropriate? Our analysis of likely market failures in the SCPV sector has drawn some rationales for regulation. These include:

- to minimise safety risks to passengers and drivers;
- to prevent monopoly pricing and consumer exploitation (consumer protection); and
- to promote a positive image for the tourism industry.[88]

There is also evidence to suggest that a further equity related objective is to ensure that all consumers are able to obtain access to passenger transport services.

The means of addressing these objectives are considered in the following sections.

[88] These goals are consistent with the statements of the Premier, Mr Jeff Kennett, when he stated in 1994 that: "The Government wants to restore pride and professionalism in the taxi-cab industry, improve safety and reliability, and give drivers a bigger role in the tourism industry", See press release "Premier takes action to ensure World-Class Taxis for Victoria", May 5, 1994.

6 Restrictions on entry

6.1 Introduction

This section looks at the legislative provisions that restrict entry into identified markets. Note that we separate restrictions on 'entry' from restrictions on 'quality of service'. While both may actually restrict entry into a market, we talk of entry restrictions as the public interest restrictions on the number of licences, or other non-quality related entry restrictions. We use the term 'public interest' in line with use of the term in the Act. We believe, however, that predominantly it is the private interest of protection of existing operators which is the dominant feature of entry restriction. The restrictions on entry we have identified include:

- Public interest restrictions on taxi-cab licences — Section 6.3
- Restrictions on entry of hire car and other vehicle licences — Section 6.4
- Restrictions on entry into taxi-cab zones — Section 6.5

We examine the effect of the restrictions and evaluate the benefits and costs of these.

6.2 Licensing of commercial passenger vehicles

6.2.1 Taxi-cabs

The provisions that restrict entry into the taxi-cab segment of the market and their effect were discussed in section 3 of the report. The combination of the 'public interest' test for the issuing of new licences and the restrictions on the operation of taxi-cabs and other SCPVs create clear restrictions on entry.

The 'public interest' entry restrictions, in fact, had their origin in efforts by incumbent operators to restrict competition. They might be considered to address objectives relating to the maintenance of average pricing and common carrier obligations. However, we do not consider that there are relevant market failure objectives addressed by this restriction.

6.2.2 Other small commercial passenger vehicles

Apart from RHV licences, which are issued 'as of right', other SCPVs are affected by similar entry restrictions to those for taxi-cabs.[89] 'Public interest' issues are again paramount in the

[89] While RHV licences are available 'as of right', in practice severe restrictions on the operation of this licence category are applied through licence conditions.

issuing of licences. Applications for licences (apart from RHV licences) are subject to a hearing by the licensing authority, at which objections to the granting of the licence may be raised by competitors and representatives of competitors.

6.3 Net benefits and costs from public interest restriction on taxi-cabs

6.3.1 Benefit one - Efficient utilisation of capacity or reduction in 'excess entry'

It is important to understand that taxi-cabs spend a lot of their time waiting – up to 70 per cent according to the VTA submission. This suggests that there is spare capacity in the system. However, it would not be a good outcome if taxi-cabs were fully utilised. As waiting times start to increase, demand starts to fall (as demand is fixed for a given waiting time, but will decline if waiting times rise). In addition, if there is too much spare capacity, average costs of operators increase because each taxi-cab must recover its costs over fewer fares per taxi-cab, and more time is spent waiting.

Submissions and journal literature tend to support the notion that open entry would reduce 'productivity' as more operators come into the industry but demand does not increase commensurably:

> "(More to the point), profits and driver incomes decline with deregulation even though the costs of production are reduced by using older vehicles and maintaining them at a lower standard."[90]

> "In every city where the taxi-cab industry has been deregulated, there has been a significant decline in taxi-cab productivity as measured by the number of daily trips per cabs and trips per shift...decreases of this magnitude in productivity have serious economic consequences for taxi-cab drivers...the average taxi-cab driver thus earns a lower income."[91]

Overseas evidence is not wholly reliable in this regard. It may be, for example, that if fare competition can be promoted with open entry that demand for taxi-cab services would rise significantly to raise vehicle productivity. However, it may therefore be possible for benefits to be generated from restricting entry on public interest grounds if:

- an open entry licensing scheme (no 'public interest' restrictions but with quality controls) would not generate an efficient level of waiting time and capacity in the industry; or if

[90] Submission of VTA, p. 75.

[91] Teal & Berglund (1987), "Impacts of Taxi-cab Deregulation in the United States", *Journal of Transport Economics and Policy*, February.

- fare regulation distorts prices such that taxi-cabs can charge higher-than-competitive prices on all or some journeys.

It is not clear that a system of open entry would generate inefficient waiting times and capacity. While there is some evidence that in high demand areas like airports open entry can lead to long waiting times for drivers, the discussion in the previous chapter showed that it is not conclusive whether low capacity and higher waiting times cost taxi-cab operators more than consumers gain. Without being able to quantify this benefit we are unable to estimate the magnitude of any gain from restricting entry in this way.

It appears that the true source of the 'excess entry' problem lies with fares. Where fares are set by a regulator at a level that is too high, or if open entry does not cause fares to fall in response to the increase in supply due to lack of competitive pressure, then we would expect this 'excess entry' result. The VTA has noted this effect in its submission:

> "If this were the only factor at work, new taxi-cab operators would continue to enter, fail and then exit the industry. This does occur in deregulated markets, but the operation of ranks creates a buffer from competitive forces – price can be raised above the marginal cost of a trip."

It is likely then that the better solution to this problem is to regulate fares to an efficient level, or to encourage competitive fare setting (particularly at ranks) by taxi-cab operators through other means. This would prevent the excess entry result common to markets that have open entry:

> "The solution to the problem of inefficient (excessive) supply, however, is not to restrict entry of town cars and taxi-cabs into the market, but to reduce fares to the market clearing level."[92]

6.3.2 Benefit two - Penalising poor service or improper behaviour

One of the benefits of having positive licence values has been perceived as the:

> "important role (licence values play) in a regulated market as a means of maintaining quality standards. That is licence values reduce the costs of monitoring and enforcing with a large number of small and widely distributed set of mobile producers."[93]

The argument is that having a financial interest in the licence provides better incentive to provide a higher quality service and minimises illegal or improper behaviour. The literature on taxi-cab regulation has also addressed this point, with Cairns & Liston Heyes (1996) and Gallick & Sisk (1987) positing the notion that licence values can play a positive role.

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[92] Boroski & Mildner (1998), *An economic analysis of taxi-cab regulation in Portland, Oregon,* available at www.cascadepolicy.org/transit/taxi-cab_reg.html.

[93] Submission of VTA, p. 40.

Evidence from the Victorian Taxi Directorate does not substantiate this benefit, however. According to its records no licences have been cancelled or suspended since 1994. In part, the Victorian Taxi Directorate advised that this resulted from the fact that as licence values are so high, the penalty from cancellation or suspension is too great.[94]

In addition, it is apparent that licence owners are not synonymous with taxi-cab drivers or operators. There is accordingly little additional incentive for a driver to comply with regulations, outside of the cost of a suspension or cancellation of a driver's certificate.

6.3.3 Benefit three – Higher quality of taxi-cab services

Many submissions argued that limitations on licence numbers were required to maintain the quality of service:

> "If there is no regulation of the number of taxi-cab licences the market will open up to an unlimited number of operators. This is likely to result in there being an oversupply of taxi-cabs with a resultant drop in earnings for some, if not all, taxi-cab drivers. There will be a consequential drop in the standards of vehicles available and the standard of service provided by those vehicles and their drivers."[95]

This argument basically comes down to the notion that by restricting the number of licences, we can increase the profitability of rides but prevent the dissipation of these profits through the entry of additional cabs.[96] This would lead existing competitors to compete by offering higher service quality (as price competition is not possible). Associated with this argument is that entry regulation decreases the cost of enforcing regulations related to service quality.

There are problems with these arguments. The rationale for regulating service quality is that consumers are unable to evaluate it sufficiently before entering a taxi-cab. Quality regulation therefore should focus on aspects of service that cannot be readily evaluated by the consumer; such as vehicle quality (e.g. roadworthy inspections) and driver quality (e.g. criminal checks). Allowing taxi-cabs to make higher profits does not ensure that taxi-cabs provide those aspects of quality that cannot be evaluated by the consumer. Taxi-cab operators could still skimp on quality checks as long as they were not observable to the consumer (e.g. less regular maintenance). Hence, limiting the number of licences is no substitute for regulation in this regard. Also, probably the biggest feature of customer service is the behaviour of the driver, and this is not directly affected by profits.

The Regulations on taxi-cabs provide for minimum standards and we therefore see any decline in quality as being an enforcement issue. The argument that 'public interest' entry restrictions allow lower enforcement costs is true in the sense that under open entry there are likely to be more cars on the road, but there are no other arguments to suggest that costs per

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[94] Victorian Taxi Directorate personal communication.

[95] Submission from Victorian Taxi Owners Group, p.2.

[96] Frankena, Mark, and Pautler, Paul, *op.cit.*, p. 71.

vehicle will be higher. Aspects of quality that could not be readily monitored under open entry cannot be readily monitored now, and we would not, therefore, expect costs of enforcing standards to rise on a per car basis.

6.3.4 Cost one - Lower taxi-cab availability

We would expect that, *a priori*, fewer licences would mean that fewer taxi-cabs would be on the road and that, therefore, average waiting times would be longer. However, this is not necessarily the case. The matching of demand with supply at different times is fundamentally what is important. The current approach to limiting licence numbers reduces the flexibility required to match demand with supply. When demand is high there is no mechanism to increase the supply of taxi-cabs, while when demand is low the high fixed costs of the licence mean that cars are run as much as possible.

Unfortunately there has been little recent publicly available research undertaken in Melbourne to determine demand and supply patterns. However, it is apparent from submissions and from other anecdotal evidence referred to in section 4.6 that at certain times there are critical shortages in supply – during major events, Friday and Saturday nights and during shift changeovers.

The issue here is one of degree. Even with open entry it is likely that there would still be significant waiting times associated with major events. With 'public interest' restrictions on entry, this problem is exacerbated. There are undoubtedly costs from these higher waiting times. The evidence available to us is insufficient to place a dollar value on these losses.

We are, therefore, unable to provide an accurate estimation of these costs, but would note that the number of submissions directed at this matter would indicate that these costs are significant.

6.3.5 Cost two - higher fares

The primary cost of the restriction on the number of licences is the higher fares that are sustainable. While it is inescapable that licence values must be raised by the impact of fares, this point was strongly challenged by industry participants:

> "Taxi licence values have never been included in the fare structure...It is true however that the inflated price of Taxi Licences has caused the taxi-cab fares to be discounted by Government who say "if the licence prices are that high then driving a taxi-cab must be very profitable, therefore you don't need a fare increase. The passenger does NOT pay for the high price of taxi-cab licences."[97]

Although some outside the industry had different views:

[97] Submission of S.E.Taxis Pty Ltd, p. 4.

> "It is quite clear that the restrictive nature of the entry requirements, and the apparent protective ways exercised by the Taxi Industry over the past Nine years has resulted in the high escalation in value in Taxi Licences. This must then be reflected in the costing and the prices charged."[98]

The VTA states that:

> "The price of licences is not, and has not at any time been taken into account in the setting of tariffs"

and, in reply to claims that removal of licence values would cause fares to fall:

> "...we make the point that the type of analysis carried out by the Industry Commission and others that suggest fares will fall, demand will increase and consumer surpluses will be greater in a deregulated market are based on invalid premises."

While taking into account these comments, it is evident that:

- the cost of a MT licence at the present time is in the vicinity of $260,000;
- the price of a licence assignment is over $20,000 per year ($1800-2000 per month);
- licence owners can therefore earn a return of roughly 8-9 per cent per year through assignment;
- licence owners who do not assign their licence forgo the 8-9 per cent return in an effort to achieve a better return within the industry or to achieve other life-style objectives.

The basic result is that a licence assignee must recover over $20,000 per year in fares before he or she begins to recover the "ordinary" costs of taxi-cab operation, such as petrol and other car costs.[99] This represents an estimated 25-33 per cent of total costs.[100]

Historical evidence also suggests that while licence values are not currently considered for fare *changes,* the fare *base* indeed contains an element of licence value. Arblaster (1979)

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[98] Submission of Mr Leigh Tait, p. 1.

[99] Alfred Kahn, in the *Economics of Regulation,* has put it this way:
"The equilibrium price for the privilege of operating a taxi-cab is the price that will just ration the available licences among the people who would like to enter the field. Taxi-cab rates and revenues must be sufficient to provide an acceptable livelihood for the driver plus a return on the...investment. Such rates and returns would therefore be excessive if it were not necessary to make that investment; or, if we look at the matter from the other end, manifestly many more drivers would wish to enter the field if they could do so without paying so high an entrance fee." p. 111.

[100] Based on estimated average annual costs of a taxi-cab of $60-80,000.

notes that the Transport Regulation Board in the 1970's allowed for a 20 per cent rate of return on operator investments:

> "The twenty per cent rate of return on investment was introduced in May 1974, and based on the purchase price of a taximeter and the purchase price of a car net of discount, but excluding the trade-in on the sale value of a taxi-cab vehicle. This twenty per cent rate of return on investment was substantially higher than the prevailing interest rates at the time it was chosen. The Board chose the higher rate of return as a compromise gesture to the taxi-cab industry who had wanted the market value of taxi-cab licences included in the investment on which the rate of return is calculated."[101]

One submission commented that licence values do not affect the "common taxi-cab licence owner":

> "Let us consider Jim. He is about 50 years old, he bought his taxi-cab licence 20 years ago. He works 12hrs a day, 6 days a week – about 70 hours. He paid off his licence 15 years ago...The current value of a licence has no effect on him, other than it would be nice to have his licence represent the goodwill he has built up by providing a good service...he does not wake up each morning worrying about licence values."[102]

This perception is common in the industry, although in our judgement it is an incorrect one. The basic fact remains that the licence owner could sell the licence and invest the money in a bank at near-zero risk for a 5-6 per cent return per year, or assign it in the industry for a risk adjusted return of close to 9 per cent. There is clearly an opportunity cost involved in holding a licence and not fully utilising it.

6.3.5.1 Partial equilibrium analysis

To attempt to determine the possible impact of the restricted entry on the welfare of the community, we used a partial equilibrium model to study these effects. The analysis makes certain assumptions about taxi-cab markets. In particular, it assumes that:

- waiting times are constant for the given number of journeys;
- prices are readily able to equilibrate to a certain competitive price, or can be regulated to achieve an efficient price; and
- there are no externalities.

We have no *a priori* reason to assume that these assumptions will significantly affect the analysis. From our perspective, changing these assumptions is just as likely to under or over-estimate the costs of regulation, for example the current calculation does not include

[101] Arblaster (1979), pp.133-134.

[102] Submission of Mr Tom Groves, S.E. Taxis, p. 3.

any dynamic efficiency gains which may accrue under free entry, or the costs of congestion / pollution externalities. Some of these effects will be positive (e.g. dynamic gains, waiting times should improve, fares will fall) and some will be negative (pollution, congestion, higher enforcement costs). We cannot be sure which way the balance will fall.

The exact determination of the model is described in Appendix C. We present here the results. Note that the results are applicable to the Greater Melbourne (Metropolitan and Outer-suburban zone) area only. The basic method was to determine the competitive price by assessing how much the licence value impacted on current prices. We assumed there would be some goodwill component still included in price with open entry and we assumed the resultant price was based on efficient costs of supply. Assuming an elasticity of demand of –0.8, we were then able to calculate a competitive quantity and consequently derive results for the "deadweight" loss of the restriction and the transfer from consumers to taxi-cab operators.[103] The "deadweight" loss is the loss associated with inefficiency in resource allocation due to restricted entry and pricing above the competitive level. It represents the loss in State output as a result of restrictive regulation of taxi industry.

The key parameters used in the calculations are shown below in Table 6.1.

[103] This is based on the assumption that the market for taxi-cab drivers is competitive. If this is not the case, and driver remuneration is currently below a competitive level, then a competitive price could be higher than that assumed.

Table 6.1 Parameters used in the calculation of welfare loss from above competitive pricing and entry restriction

Input	Source	Denoted by	Base value
Current quantity of trips	VTA submission	Q_c	22,400,000
Licence value (less goodwill)	Victorian Taxi Directorate, KPMG estimate, Industry Commission (1994)		\$265,000 – 10% = \$238,500
Rate of return	Victorian Taxi Directorate	r	9%
Average kilometres per taxi-cab	VTA	V_{km}	125,400
Vehicle utilisation (paid kilometres / total kilometres)	VTA	V_{ut}	58%
Elasticity of Demand	Various sources, including: ■ Beesley (1992) ■ Frankena (1983) ■ VTA Submission	ε_D	-0.8
Current price (of an average taxi trip)	VTA	P_c	\$12.98

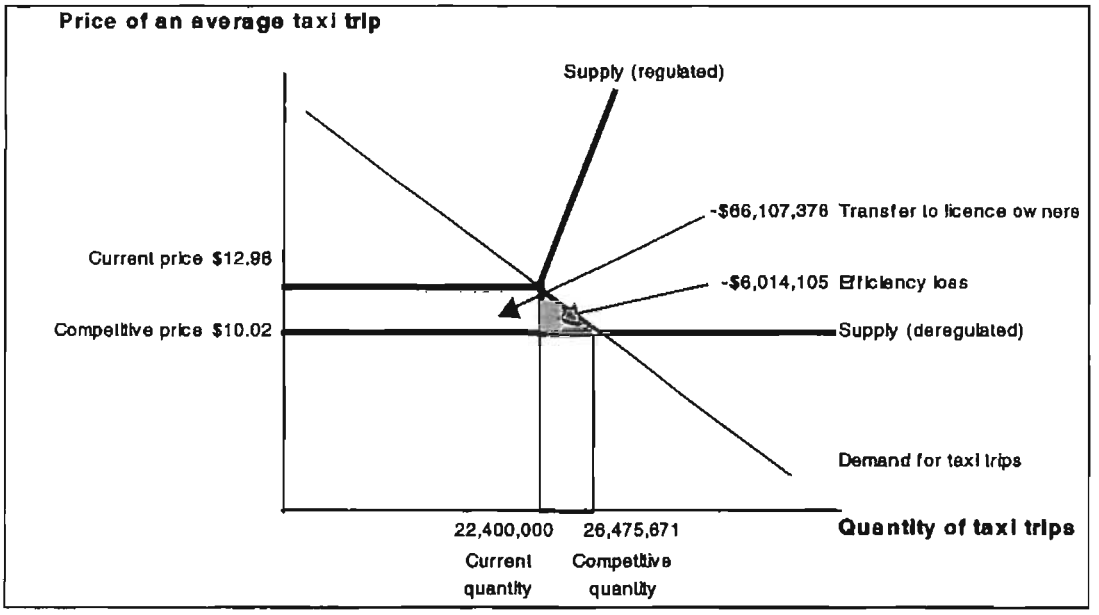
Table 6.2 shows the likely effect of high licence values on consumer welfare. The loss in consumer surplus is estimated to be \$72 million per year. Owners of taxi-cab licences benefit from higher fares by approximately \$66 million per year. The 'deadweight' efficiency loss to the community as a whole from not consuming the efficient level of taxi-cab trips is approximately \$6 million per year.

Table 6.2 Base case results for net licence value equal to zero

Results	Base case
Licence value	$238,500.00
Return on licences per year	9.00%
Elasticity of Demand	-0.8
Current quantity of trips	22,400,000
Current Price	$12.98
Competitive Price	$10.02
Competitive quantity	26,475,671
Estimate of efficiency loss per year	-$6,014,105
Estimate of transfer per year	-$66,107,376
Change in consumer surplus per year	-$72,121,480

Figure 6.1 illustrates the effect of the restriction in terms of the market for taxi-cab trips in the Greater Melbourne area. Supply is considered to be relatively inelastic (although not perfectly inelastic) past the current number of trips because the supply restriction prevents a greater number of trips being serviced.

Figure 6.1 Effect of supply restriction in Greater Melbourne



Note that this diagram and the calculations ignore the potential additional deadweight losses of producer surplus (by assuming perfectly elastic supply in a deregulated market). This would tend to increase the total loss (although we ignore it, as estimates of supply elasticity are inherently difficult for a deregulated situation).

We take the existing cost levels (excluding the licence value) as setting the base for the competitive price. If driver remuneration was inappropriately set at levels which were too low, then this competitive price would be higher and the perceived consumers' welfare losses of restricted entry would be lower. Alternatively, if costs were excessive due to inefficiency, the measured welfare losses would be even higher.

The greatest influences on the size of the losses are the licence values and the elasticity of demand. As the licence value grows (assuming other things equal), the size of the losses increases at an increasing rate. This is illustrated in Table 6.3:

Table 6.3 Impact of licence values on "deadweight" losses

Licence value	"Deadweight" loss
$25,000	$66,081
$50,000	$264,323
$100,000	$1,057,290
$150,000	$2,378,903
$250,000	$6,608,064
$350,000	$12,951,805
$500,000	$26,432,255

The efficiency losses grow exponentially as price-cost margins and licence values increase.

As the elasticity of demand gets (absolutely) higher, the losses from the supply restriction get relatively larger, that is, people are more willing to substitute away from taxi-cab use if prices rise and the effect of the restriction is magnified. Conversely, if the elasticity of demand is (absolutely) lower (less elastic) than -0.8 then the losses identified would be smaller. As noted in Appendix C we accept -0.8 as we have no evidence to contradict this (commonly assumed) figure.

The basic conclusion from this analysis is that the economic cost of restricted entry, coupled with fare setting above the competitive level, is very high. It suggests that large profits have been available to licence holders. In many cases these will have been capitalised when licences have been sold.

6.3.6 Cruising and pre-booked markets

Our analysis has shown the benefits of restrictions on entry are unlikely to be as large as the costs. It is also the case that entry controls do not address identified market failure problems in a direct manner. We return to this issue in section 10.

It has been raised previously that most of the potential benefit relating to limiting the number of licences relates to the 'cruising' rather than the 'pre-booked' markets, particularly where the city involved has a significant airport business.[104] This is also consistent with experience in the United Kingdom discussed below. The majority of problems with taxi-cabs in deregulated markets have tended to occur in areas like airports where the large number of

[104] See comments of Dr Ian Radbone in the Industry Commission inquiry *Urban Transport in Australia*, p. 405.

entrants have congregated.[105] Short run monopoly problems are also greater in cruising markets. Pre-booking tends to eliminate most of these problems, as consumers can more readily compare prices.

It is possible, then, to distinguish the two different markets:

- in pre-booked markets, there is insufficient evidence to suggest that there will be service problems if entry into this market is deregulated;
- in cruising and rank markets, it is plausible that there may be service problems (service refusals, long queues) *in the short term* associated with an increase in entry. In part this will depend on fare regulation, which may encourage the 'excess entry' result with associated problems, and attempts to make ranks more competitive.

6.4 Net benefits from public interest restrictions on other small commercial passenger vehicles

6.4.1 Hire cars

The main purpose of restricting hire car licences appears to be to limit competition with taxi-cabs, whose services are, in the booking segment of the market, substitutable. Hire cars are already made less competitive by the requirement to use 'luxury' vehicles, but presumably benefit from their ability to reject unprofitable customers. They are not required to be hired on demand, and can focus on higher margin journeys.

The Victorian Hire Car Association argued for the retention of the restriction on entry into the hire car sector:

> "There has been a 291% increase in hire car licences since 1984/85, that is an increase of 379 licences over the last 14 years. This increase in competition is even greater if the special purpose and restricted hire licences are included; in which case since 1984/85, that is an increase of 1,757 licences over the past 14 years."
>
> "The Association argues that it is not in the public interest to allow free entry into the market to the extent that additional licences would:
>
> - undermine the stability of the value of existing hire car sector licences;
> - impact on the financial ability of operators to provide a safe, quality service;

[105] See references such as Morrison, P. S. (1997). "Restructuring effects of deregulation - the case of the New Zealand taxi-cab industry." *Environment & Planning A* 29 (5): 913-928, Dempsey, P. S. (1996). "Taxi industry regulation, deregulation and reregulation: the paradox of market failure" *Transportation Law Journal* 24 (1): 73-120.

- set aside a leg of the public employment arrangement the Government has with the sector; and

- reduce one of the financial incentives to perform.

The Association supports the continued oversight of the industry by the Directorate and the retention of the public interest provisions of the Transport Act." [106]

We consider there are serious problems with these arguments:

- the value attaching to hire car licences is a private benefit that has an associated public cost (similar to taxi-cabs);

- the transitional problems associated with reducing licence values should only be seen as an equity and taxation/compensation issue for taxpayers (because the cost to licence owners will be offset by a benefit to consumers); and

- we do not see any link between financial incentives to perform and the value of hire car licences.

We consider, and history supports the view, that arguments relating to the entry of hire cars are tied closely to the restrictions on taxi-cabs. In effect, there has been a regulatory attempt to segment these vehicles into serving specific markets. An assessment of costs and benefits must therefore take these restrictions into account as well.

6.4.2 Other small commercial passenger vehicles

While conditions for RHVs ensure that licences are issued 'as of right' there has been no change to the 'public interest' restrictions surrounding SPVs. It is difficult to understand why this is the case. The nature of SPV licences is very restrictive – only being allowed to undertake specific designated functions (such as weddings, balls or transporting school children). It is not clear what purpose the restrictions serve, aside from protecting incumbents (as well as taxi-cabs and hire cars) from further competition.

We can identify few public benefits from this restriction, and conclude that the costs are likely to outweigh significantly the benefits.

6.5 Net benefits of zoning restrictions

Taxi-cab licence conditions specify the areas in which taxi-cabs can operate. As noted in section 3.2.1.1 above, this has resulted in the creation of the Metropolitan zone, the Outer-suburban zone (the old Frankston and Dandenong zones) as well as country zones. The

[106] Submission of Victorian Hire Car Association, p. 27.

Outer-suburban zone is a relic of the more extensive zoning put in place by the TRB. The Foletta Inquiry into Melbourne's taxi-cab services noted the Road Traffic Authority investigated abolition of the zones in 1984, but this did not proceed. The Foletta Report also recommended that the zones be incorporated into the Metropolitan zone, and that licences for these areas be converted to Metropolitan licences.

The rationale for zones today is even less clear. In the past they have been seen as a regulatory tool to try to ensure service was provided to all areas. This may have been necessary if fare regulation prevented the full cost of journeys from being recovered, thus creating a tendency to only travel short distances to a fare.

6.5.1 Benefits

Dandenong Taxis argued for the retention of zoning and in particular the retention of the Outer-suburban zone. Its argument is based on two perceived benefits of the restriction:

- that operators have a greater understanding and experience with local issues and concerns; and
- the zones ensure that service is maintained across the zone.

We do not consider that the first benefit is significant in nature. In the absence of the zone the travelling public would choose to use the service that offers the best combination of price and service quality. If Dandenong Taxis were perceived to provide a superior service then we would expect limited impact on their business.

The second benefit is related to the objectives of the provision. In the absence of zoning restrictions, drivers may move to areas where demand is heaviest, resulting in longer waiting times and possible service refusals for those in isolated areas. For example, an operator in a thinly populated rural area might service a nearby regional centre rather than service the area in which the driver is based. We are unable to quantify the magnitude of this benefit, but suspect with the current regulations in place on fares and entry it could be significant. In relation specifically to the Outer-suburban zone, we see that this provides less of a benefit. There is substantial traffic already existing in these zones (which is reflected in the similar licence values in comparison to the Metropolitan zone), and the impact of merging the zones would be relatively small. Other outer-suburban areas of Melbourne do not appear to have significant supply problems. Data to confirm this was requested from the VTA but was not provided.

Dandenong Taxis also argued that their use of a 'roster' system for ensuring cabs are always available throughout the week would be undermined by the removal of this restriction. However, it is not clear that this would be the case if public interest restrictions were removed. It could be argued that the limited number of licences creates the need to ensure that service is supplied at all times. The key point is that service to consumers from all operators will be maintained.

6.5.2 Costs

It is clear that the use of zoning has negative efficiency effects for the operation of a taxi-cab. When a taxi-cab moves out of its zone on a fare it basically is resigned to returning to the zone without a fare. This increases the costs of operation and can even discourage working outside of that zone.

There are further costs from limiting taxi-cab mobility. During high demand periods in certain areas (e.g. Saturday nights in Melbourne) it is possible that outer-suburban zone taxi-cabs could alleviate supply shortages and still service the Outer-suburban zone area. Similar situations could apply in country areas.

Two submissions commented:

> "When delays occur because of high demand for Dandenong Taxis and because they operate a monopoly in that area, people constantly try to hail my taxi-cabs and do not understand when they are passed by."[107]

> "The current Legislation prohibits taxi-cabs from working outside its licensed-zoned area. For country operators this results in a considerable amount of dead kms that is unpaid kms and seriously affects viability...On many occasions, particularly on Friday/Saturday and special events, we are literally mobbed by the public when dropping off our customers in Geelong city...If the prime objective is truly to meet consumers needs then this cannot be achieved by current zoning conditions that force a country operator to drive away empty from a disbelieving customer."[108]

The magnitude of the efficiency cost is difficult to calculate. One approach might be to calculate the number of journeys that finish out of the zone and then estimate the costs of returning without a passenger. However, we do not have sufficient data to undertake this task.

In relation to the Outer-suburban zone, it appears that the rationale for this is no longer relevant. Dandenong and Frankston areas are no longer the 'outer-reaches' of Melbourne, and we consider that the zoning restriction is arbitrary and likely to create considerable distortion (with many passengers travelling to and from the Metropolitan to Outer-suburban zone). It has also been pointed out that the boundaries of 'Metropolitan' public transport extend far beyond this zone, to Dandenong and beyond.[109] The tow truck allocation scheme that applies to "Metropolitan" Melbourne also applies to areas in this zone. We agree with the 1986 Foletta Inquiry that:

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[107] Submission of Mr Clive McKenzie.

[108] Submission of Mr Zyg Zielinski.

[109] Submission of Victorian Taxi Driver's Association, p. 7.

"the present Metropolitan zone boundary is illogical and should be extended to include the Frankston and Dandenong Zones."[110]

6.5.3 Conclusions

The use of zoning for taxi-cab operators is a clear restriction on competition. The Outer-suburban zone is a restriction on competition that is likely to have costs that outweigh its benefits. The zone makes an artificial distinction between this area and the Melbourne Metropolitan region and should be removed.

In relation to country zones, we have limited information to determine whether the benefits of these restrictions outweigh the costs. In part, this depends on specific circumstances on how limiting the zones are.[111] Most country markets will be somewhat isolated by geography and will tend to have less significant cruising markets relative to booking markets than the Metropolitan area. Zoning is then largely be unnecessary. Further, if 'public interest' based entry restrictions generally were removed there would seem little reason to have zoning restrictions. We therefore conclude that they should be removed.

[110] Foletta, p. 61.

[111] If zones were clearly defined areas (i.e. most trips started and finished within a zone) the distortions and hence efficiency costs are likely to be lower.

7 Restrictions on inter-modal competition

7.1 Introduction

This section looks at restrictions associated with the segmentation of various modes of transport. Trains, trams and buses are in effect protected from competition with taxi-cabs and other SCPVs, while taxi-cabs to some degree are themselves protected from competition from hire cars.

7.2 Net benefits from restrictions on SCPVs competing with public transport

SCPVs, including taxi-cabs, hire cars, Special Purpose and RHVs, are prevented from competing with public transport through a licence condition that prevents these vehicles from plying 'regular routes'. It would not be possible for these vehicles to, say, compete with a regular public bus service. It would not be possible for these vehicles to supply regular routes even when a bus service was not provided, including, for example, a service on a bus route after the bus service had finished for the night.

7.2.1 Benefits

There may be benefits in ensuring the viability of a route operation by not allowing competition on that route. Taxi-cabs and other SCPVs could trace the routes of public transport vehicles to pick up passengers during peak periods. This would have the effect of reducing the profitability of these services, while during periods of low patronage there would be less incentive for taxi-cabs to run such services. The outcome may well be a decline in the service provided by public transport, as subsidies would tend to increase, which may necessitate fewer services. On the other hand, a diversion of traffic to taxi-cabs might reduce the size of the fleet necessary to service peak demand. As much of the peak fleet is idle during off-peak periods, this could be seen as an offsetting cost of the licence condition. However, this argument applies also to other providers of public transport services. It does not provide any justification for excluding taxi-cabs and hire cars from competing for the right to provide the route services in the first instance.

7.2.2 Costs

The costs are related to the lack of choice in determining the mode of transport that offers the best combination of price and quality. This can lead to undesirable efficiency effects. For example, where there are few customers, taxi-cabs may be a more efficient means of transport than a large bus.

7.2.3 Net benefits

There seems little reason in principle for excluding taxi-cabs and hire cars from the right to compete for the right to supply route services. It also seems that there is potential for transport service delivery to improve, particularly in periods when public transport does not run and this may be achieved by allowing taxi-cabs and hire cars to operate route services. We consider that the licence restriction imposed on taxi-cabs to prevent them originating or maintaining "a regular service on any route between any two given points" be removed. Instead, the condition should allow route services except where franchising agreements for route services already exist.

This recommendation may need also to be taken into account by the Review of Large Commercial Passenger Vehicle legislation.

7.3 Net benefits from restrictions on taxi-cabs and hire cars

There are two main restrictions on hire car licences compared to taxi-cabs:

- age and other vehicle restrictions; and
- hire cars must be pre-booked.

These restrictions reflect the notion that hire cars serve a particular market segment and should not encroach too far on markets supplied by taxi-cabs. If these restrictions were removed there would in effect be little difference between hire cars and taxi-cabs, apart from the fact that taxi-cabs could be hired on demand, were subject to fare control and had a distinctive livery.

While we see that hire cars are prevented from competing with taxi-cabs to some extent, the requirement to be hired on demand also prevents taxi-cabs from competing with hire cars. To see why, we can look at a case where a taxi-cab company might introduce a new fleet of expensive vehicles and high quality drivers to compete more effectively. The taxi-cab company would not be able to differentiate these taxi-cabs because they must be able to be hired on demand. Customers would demand these taxi-cabs as a first preference, because they could not be charged higher fares to compensate for the higher quality. So the combination of the hiring on demand and fare regulations also restricts taxi-cabs in competing with hire cars.

The benefits and costs of these restrictions are intimately related to the restrictions on entry into the hire car and taxi-cab industries. Above we have indicated that the costs of restricting entry into the pre-booked market especially are likely to outweigh the benefits. Restrictions that place hire cars at a disadvantage to taxi-cabs create further undesirable distortions. If taxi-cab standards are considered the minimum suitable to ensure the safety of passengers and drivers, then we do not see any reason for higher vehicle standards for hire-cars to be

specified by the Regulations. The costs of these restrictions are likely to outweigh the benefits.

7.4 Other restrictions

A number of submissions commented on the flexibility of the licence categories relating to different modes of vehicle. In most cases this resulted from a licence owner wishing to undertake a 'mix' of activities that was deemed not to be consistent with the existing licence:

- an owner of a SPV could not also use this vehicle to undertake tourist trips[112];
- Restricted Hire (Motorcycle) Licence holders were prevented from generating sufficient business and from providing a 'timely service'.[113]

Again, while we can discuss these restrictions in the abstract, the question of entry controls needs to be discussed within the broader context of taxi-cabs and hire car regulation as the type of services proposed are only currently legitimately undertaken by these parties. The significance of these cases is not that entry was restricted, but that licence conditions placed such stringent conditions of operation that business viability was limited.

Reforms to public interest restrictions must also therefore ensure that licence conditions do not limit vehicles to specific operations. While we see differences between the cruising and pre-booked market we consider that all pre-booked vehicles should face the same licence conditions on operation. We return to these issues in section 10.

[112] Submission of Mr Robert McAllan.

[113] Submission of Mr John Karmoche, p. 2.

8 Restrictions on price

8.1 Introduction

This section examines the restrictions of the prices and fares that taxi-cabs and other SCPVs can charge.

8.2 Legislative provisions and effects

Provisions relating to taxi-cabs fare regulation are contained in the *Transport Act* (s.144 and s.162), the *Transport (Taxi-cabs) Regulations 1994* and licence conditions. Section 144 provides for "reasonable fares or hiring rates" to be charged, as determined by the Secretary. Clause 34(2) of the *Regulations* states that "a taxi-cab driver must not charge or ask for payment of a fare or additional charges which are more than the amounts allowed in the condition of the licence." As the issuer of licences, it is the therefore the Victorian Taxi Directorate's responsibility to regulate fares. Licences conditions ensure that taxi-cabs must charge only the (fixed) fares and hiring rates approved by the Victorian Taxi Directorate

Further, the Regulations limit negotiation of fares. Taximeters calibrated to the fares determined by the Victorian Taxi Directorate are required to be fitted, and must remain operational. Multiple hiring (the practice of accepting more than one group of passengers at a time) is also regulated in licence conditions and Regulations. While carrying more than one hirer in accordance with the provisions of Regulation 34(8), the hiring charge for each hirer must not exceed 75 per cent of the metered fare.

Restrictions on prices charged are a significant restriction on competition. Pricing behaviour is an important, if not the most important, component of competition. Fixing prices reduces the ability of more efficient drivers and depots to compete by charging different prices and supplying different price/service quality options. In addition, fixing prices may reduce the *incentive* of drivers and depots to minimise costs so as to obtain an advantage over rivals. This can further weaken competition in the marketplace.

There are few controls on the prices charged by other SCPVs. Under s.145 of the Transport Act a condition of the licence is that "reasonable fares or hiring rates shall be charged." We are unaware of any case where the Victorian Taxi Directorate has intervened in relation to hire car charges. Under s.162 the Governor-in-Council has the power to effect regulations which set hiring rates. We understand that these powers have not been used in relation to these types of vehicles.

8.2.1 Victorian Taxi Directorate fare regulation

The Victorian Taxi Directorate has taken a number of different approaches to regulating fares in the taxi-cab industry. We understand that until recently a cost model, representing

the costs of taxi-cab operators, was used to adjust fares. For example, an increase in the cost of petrol or LPG would lead to pressure for a review of fares. In recent times, the Victorian Taxi Directorate has indicated that it would prefer to move to an approach based on movements in the CPI, or transport components of the CPI. However, we note in relation to this that:

- ensuring that changes in fares are related to cost movements does not mean that the original base fare level was appropriate in terms of reflecting efficient supply costs; and
- information on changes in productivity, costs, demand, elasticities and waiting times should also be taken into account in determining fares.

8.3 Net benefits of fare regulation

8.3.1 Benefits

8.3.1.1 Lower transactions costs

A large number of taxi-cab journeys are taken annually, although most passengers' frequency of use would not be high. If fares were free to be negotiated on a trip-by-trip basis, the knowledge that consumers and drivers would have to obtain could be large – as both parties would be keen to avoid being 'exploited'. It is difficult to compare prices in the cruising market because of the spatial nature of the industry. Efficient prices will vary depending on location, time and length of trip. Information-seeking activities are costly and these costs might be avoided if fares are regulated. This benefit could be quite large, with an estimated 28-35 million trips made in Victoria per year.

It might be argued that these transactions costs occur in many consumer purchase situations. However, we see the key difference with taxi-cabs being the ability of drivers to exploit passengers in bargaining over fares. This provides possible justification for a fare ceiling only, not a fixed fare. The requirements for a meter might also be considered as delivering benefits consistent with reducing consumer exploitation.

8.3.1.2 Less exploitation of market power

A primary reason for fare regulation, alluded to earlier, is the problem of (short-run) monopoly power and exploitation of consumers by drivers. Consumers derive benefits because they cannot be "forced" to pay a high price when demand exceeds supply (e.g. long queues at ranks) and drivers derive benefits because they are not "forced" to accept a low price when supply exceeds demand. The magnitude of this benefit is potentially significant for a number of reasons:

- tourists would appear to be primary candidates for exploitation, which would present a negative image of Melbourne and possibly result in negative externalities to the tourism industry;

- elderly and infirm users of taxi-cabs are also likely to be readily exploited – having few transport options and limited bargaining power; and

- users may be exploited late at night when there are few transport options available to them.

Again these benefits should not be seen as a broad justification for fixed prices. Fare ceilings rather than fixed prices could achieve similar benefits yet retain the possibility of fare competition.

8.3.2 Costs

8.3.2.1 Possible high prices

Regulating taxi-cab fares is not an easy task and the risks of "regulatory failure" are considerable.

Generally the principles underlying price regulation are well known – prices should be regulated such that they reflect efficient costs of the services provided (including a rate of return), and do not include "super-normal" profits. This price will lead to a maximum of consumer and producer surplus.

The benchmark for price regulation is usually the marginal cost of producing an additional unit of the service. Under certain conditions application of this pricing rule will lead to efficient outcomes in the sense that goods are produced efficiently and the price the good is sold at reflects these efficient costs.[114] However, in relation to taxi-cabs this 'first-best' pricing solution is not appropriate. Due to the costs of vehicle and driver waiting time, pricing at marginal cost of a journey will cause the industry to make losses. This is because costs are incurred while cruising or seeking out passengers. Therefore a second best solution that minimises distortions to this benchmark must be sought.

The Victorian Taxi Directorate regulates the industry using a form of average pricing. Fares are not set to recover the costs of particular journeys, only on the average of all journeys. This method of pricing evolved when markets were much less regulated than they are today and it may be seen as promoting some efficiency and social objectives. The efficiency concern is for consumers to face a simple fare structure (reducing transactions costs), while the social concern possibly lies with the single price across all zones.

[114] This is known as the first fundamental theorem of welfare economics.

In principle, the benefits of simple average cost pricing could offset the costs of specific prices not fully reflecting costs, providing the averaging was not too extensive. However, the major concerns with the regulation lie with:

- the risk that prices are set too high;
- the reduced incentive to innovate and respond to the needs of consumers; and
- the possibility that fare regulation may involve excessive averaging.

On the first point we have elsewhere concluded that there is considerable evidence to support the notion that prices are too high, and that the information requirements to set fares at an efficient level are complex.[115] Increasing efficiency in operations and soaring licence values suggests that there is a fundamental divergence between costs and prices in the industry. We would note again the size of the licence values in Melbourne – higher than values in nearly every jurisdiction examined and even comparable to values in New York where until recently there had been no new licences issued for 50 years. One way to reduce the economic welfare losses discussed in the previous section would be to reduce prices by regulation.

High fares also disproportionately hurt the poor and those with few transport options (e.g. the disabled). The Australian Bureau of Statistics Household Expenditure Survey (1993-94) revealed that households with the lowest 20 per cent of incomes contributed 13.6 per cent to spending on taxi-cab fares while contributing 10.1 per cent to total commodity and service expenditure.[116]

The Trade Practices Commission (1993) was extremely critical of the lack of incentives that even maximum fare regulation provides for taxi-cab operators to show entrepreneurship. A regulated maximum fare generally provides an industry focus point for pricing which would not exist in the absence of regulation. In an industry with high concentration, a strong trade association, inelastic demand, and the type of service that is not conducive to price-

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[115] Arblaster (1979) notes that to regulate the industry efficiently would require knowledge of:

- the elasticity of demand with respect to fares;
- the elasticity of demand with respect to hours of taxi-cab service supplied;
- the elasticity of supply of hours of taxi-cab service with respect to average revenue per period;
- the cost associated with operating a taxi-cab;
- the existing hours of taxi-cab service supplied and total distance travelled;
- the existing number of paid hours and paid distance travelled;
- the existing average expected waiting time.

The Victorian Taxi Directorate appears not to have any of this information.

[116] Australian Bureau of Statistics, *1993-94 Household Expenditure Survey, Detailed Expenditure Items,* (Cat. No. 6535.0).

cutting[117], it is very likely that gravitation to the maximum fare will occur. Taxi-cab operators are also unable to be rewarded for operating a higher quality service that involves higher costs and prices. The evidence from the hire car sector, which has expanded rapidly and still has shown a large increase in licence values, shows there is considerable demand for higher quality taxi-cab services, or that given the inflated taxi fares, some customers are switching to hire cars.

The lack of incentive to compete on price allows the costs of the industry to remain higher than they otherwise would, because other operators do not undercut them. This is known as X-inefficiency. There is some evidence to suggest that current fare regulation allows behaviours inconsistent with efficient operation. In particular, single owner-drivers have been protected from the requirement to utilise their vehicles more fully – although this is slowly being eroded by the increase in assignments (which is driving licence values up). Fleet operators, who use their vehicles more efficiently by ensuring they are double-shifted and running at most times, are not able to undercut these owner-drivers on price and allow them to remain in the industry. Statistics suggest that over half the taxi-cab fleet are owner-drivers, although we would hasten to add that not all owner-drivers would be using their cars inefficiently.

8.3.2.2 Higher waiting times

One manifestation of the problems with existing fare regulation is that it is difficult to match the demand for taxi-cabs with the supply. Differential pricing, in particular higher prices in peak periods, could mitigate this problem by ensuring that the rewards for driving were higher during periods when demand is higher. This could take the form of:

- a surcharge for busy periods; or
- a higher per kilometre rate.

For example, if fares were not regulated, or regulation was more flexible, a taxi-cab company might raise fares on a Saturday night when demand is at its highest to ration the limited capacity of its vehicles. This would decrease the waiting time for a taxi-cab by reducing total demand. The effectiveness of peak pricing would be reduced, however, where demand was reasonably inelastic with respect to taxi-cab fares. However, in combination with the removal of entry controls, higher prices for peak periods would help signal to vehicle owners when it is most profitable to have their vehicles on the road. Supply could become more responsive to changes in demand.

As noted in the section on entry controls we have no estimate of the cost of higher waiting times associated with current pricing. Differential pricing is often unpopular with

[117] Because the benefit from cutting prices on a trip would be quite small relative to total industry demand, while the costs of competitor retaliation would be high if fares fell across all trips.

consumers, and increases the amount of information required to purchase taxi-cab trips. There are potential costs if a regulator sets differential prices incorrectly.

8.3.2.3 *Reduced product differentiation*

Setting fares at a certain level where quality is not readily observable invariably implies that quality as well as price must be controlled. Otherwise, operators will try to cut service costs and quality to increase profits. Mandating a specific fare level with minimum quality standards, however, reduces the incentive for operators to 'tailor' the service for a particular group. For example, taxi-cabs will not offer a 'superior' service (to compete, say, with limousines) because the higher costs of operation could not be recovered unless fares were raised. Hence, consumers suffer because regulations prevent operators from providing services that are demanded, and because competition is weaker than otherwise in the regulated luxury passenger vehicle segment of the market.

It is uncertain how large these costs are likely to be. Taxi-cab industry bodies in the past have suggested that consumers generally prefer the convenience of a 'standard' taxi-cab.[118] There is mixed overseas evidence on the impact of deregulated markets on service differentiation by taxi-cabs.

8.3.3 Cruising and pre-booked markets

The previous section noted the considerable differences in operation of these two markets. Again we note that problems justifying fare regulation basically only apply to the cruising and rank markets where competitive fare levels may not be sustainable. The pre-booked market offers more opportunity for efficient competitive market outcomes.

8.4 Conclusions

The evidence examined suggests that there are large costs imposed by fare regulation. This is exemplified by the high transfer values attached to licences. This does not necessarily imply that fare regulation is inappropriate – indeed, it is highly likely that given current entry restrictions fare regulation is a 'necessary evil'. But neither does it imply that the regulation could not be improved.

In our view there would be higher benefits from ensuring that the method of price regulation is consistent with economic efficiency principles and provides incentives for further innovation. Alternatives to fare regulation are considered in section 10.

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[118] The Australian Taxi Industry Association submission to the Industry Commissions 1994 report on Urban Transport suggested that "While the Industry Commission shows a clear bias towards customers choosing between the various qualities of service that would allegedly be on offer under deregulation, this is not what the community wants...At times of high demand...the opportunity for choice is limited.", p.401.

9 Restrictions on quality of service

9.1 Introduction

This sections looks at restrictions that have broadly been defined as 'quality' restrictions – that is, restrictions that are designed to ensure that a certain (minimum) quality of service is provided to all taxi-cab and other SCPV users. This covers both occupational regulation of drivers and service standards.

9.2 Legislative provisions

The Transport Act and associated Regulations provide for extensive controls on the types of services available and the standards at which they must be delivered. We have referred to all of these sorts of controls as restrictions on "quality of service". This is not to suggest that these provisions actually restrict or reduce the quality of service provided, but that the provisions restrict the characteristics of the services to at least a minimum standard (or minimise variations in the standard) of service.

It is a common feature of competitive markets that different levels of service or different quality products are provided. For example, when buying a television set there will be many different models with different functions available. Similarly, when flying on an airline, there will usually be two or three different 'classes' of travel providing different levels of service. Taxi-cabs, however, are regulated such that there is minimal variation in the quality of service provided (excluding, of course, the driver, whose quality of service can only be restricted in a very limited way, by ensuring they hold a driver's certificate). For example, all taxi-cabs must be less than 2 years old when first brought into service. In addition, all taxi-cabs have minimum size and passenger arrangements.

The objectives of this form of regulation can be broadly summarised as:

- public and driver safety;
- enhancing the reputation of the industry; and
- consumer protection.

We have seen that these objectives are consistent with dealing with certain market failures, namely, information asymmetries between passengers and drivers and (short-run) monopoly power. Reputation factors are important when considering the impact of poor quality service and the inability of passengers (particularly tourists) to assess quality prior to a trip.

At a broad level we can identify several main categories of service quality restriction. These are:

- occupational regulation of drivers and licence owners;
- restrictions on the vehicle or licence owner; and
- restrictions on behaviour.

A summary of the specific types of restrictions that have been classified in this way is presented in Table 9.1. These restrictions can raise the costs of production of the service (passenger trips). Competitive pressure can lead drivers and operators to 'cut corners' on vehicle and driver standards. This is not a good thing if consumers cannot readily distinguish the good quality from the bad.

In general, we would expect that the competitive restriction imposed by quality controls is likely to be smaller than that imposed by quantity or fare controls. These controls are often of a minor nature in competition terms (e.g. a requirement on a driver not to drink alcohol) and generally they do not distinguish between existing and potential operators. The following table identifies competition restrictions and their significance by classifying them as 'minor' or 'major'. Minor might be considered to be a regulation that imposes a cost of less than $500 per taxi-cab, or has little impact on actual operation of the taxi-cab.

Table 9.1 Restrictions on quality of service

Vehicle	Restrictions on licence / vehicle owner	Major / Minor	Restrictions on behaviour	Minor / Major
Taxi-cab	■ Vehicle age restrictions	Major	■ Records as determined by VTA must be kept (r.8)	Minor
	■ Taxi-cab must belong to an approved depot	Major		
	■ Taxi-cab owners to present vehicle for inspection to Victorian Taxi Directorate (r.19)	Minor	■ Maximum number of passengers must be adhered to (r.21)	Major
	■ Must attach signs, symbols, etc. as determined by Victorian Taxi Directorate (r.9)	Minor	■ Passenger routes must be complied with (r.22)	Minor
	■ Must ensure that taxi-cab complies with all the specifications of schedules 2 and 3 of the Regulations (r.10)	Major	■ Touting for business is not permitted (r.23)	Major
			■ Smoking prohibited in taxi-cab cabs (r.27)	Minor
			■ Driver must wear uniform and be neat and clean (r.25)	Minor
	■ Emergency warning devices must be fitted (r.12)	Minor		
	■ Boot lock release device must be fitted (r.13A)	Minor	■ Driver not to consume alcohol (r.26)	Minor
	■ Driver duress alarm must be fitted (r.13B)	Minor	■ Driver must provide assistance to passenger (s.31)	Minor
	■ Livery of taxi-cab must be in accordance with that determined by Victorian Taxi Directorate (r.14)	Major	■ Driver must wait if requested and provide information on fares (r.34)	Minor
	■ Sign on roof of taxi-cab (r.15) and tariff lamps (r.16)	Minor		
	■ Air conditioner must be fitted (r.18)	Major		
	■ Vehicle must be fitted with taximeter (r.35)	Major		
Hire Car and SPV	■ Number plates, signs, etc. must comply with Victorian Taxi Directorate directive (r.11)	Minor	■ Driving in "hazardous areas" requires hazardous area authority (r.9)	Minor
	■ Vehicle specifications as set in Schedule 2 of the Regulations (s.12)	Major	■ Books or records must be kept (r.10)	Minor
	■ Vehicle may be required for inspection (r.18)	Minor	■ Maximum number of passengers must be complied with (r.21)	Major
	■ Vehicle must be "fit and serviceable" (r.19)	Minor	■ Ticketing requirements for public commercial passenger vehicles (r.22-23)	Minor
	■ Fire extinguishers must be maintained (r.35)	Minor		
	■ Additional requirements for motorcycles and buses in Schedules 2 and 3	Minor	■ Touting not permitted (r.24)	Major
			■ Smoking not permitted in omnibuses (r.32)	Minor
			■ Driver must be neat and clean (r.25)	Minor
			■ Driver must not consume alcohol (r.31)	Minor

The following section discusses the costs and benefits of occupational regulation of drivers before considering service quality controls in general, specific controls and commenting on the balance of costs and benefits.

9.3 Net benefits of occupational regulation of drivers

Drivers of hire cars, taxi-cabs and other SCPVs are required to gain a driver's certificate to drive these vehicles (s.156). In contrast to other restrictions, a restriction on the entry of drivers attracts little controversy. There were few submissions that suggested that the requirements for entry were onerous, and some suggested that it may be preferable for it to become more so, eg. by tougher knowledge tests for taxi-cab drivers.

The primary purpose of these restrictions is to address the inherent asymmetry between passengers of vehicles and drivers. Passengers are not readily able to assess the characteristics of drivers, and it is not apparent that it is easy for drivers to distinguish themselves as safe and competent. In any event, even at small levels of non-compliance there may be significant problems – particularly when it comes to drivers with serious criminal convictions or medical problems.

9.3.1 Costs

The relevant costs are largely those of the administrative costs of running a certificate scheme (including the TAFE course) and the opportunity costs that drivers forgo in training. These are not estimated to be large, the training course and certificate tests require only 40 hours. The VTA provided estimates of $937 per driver for the training course and $600 in lost wages per driver. We note that certificate fees are not directly relevant as social costs as they are simply transfers of money between the drivers and Government. An estimate provided in the Regulatory Impact Statement for the *Transport (Taxi-cabs) Regulations 1994* suggested that the cost to the Victorian Taxi Directorate of managing the Driver's Certificate function was $272,000 per year.[119]

9.3.2 Benefits

The benefits largely derive from the reduced risk of problems associated with poor quality drivers:

- lower risk of criminal assaults;

[119] Victorian Taxi Directorate, Regulatory Impact Statement for the *Transport (Taxi-cab) Regulations 1994*, 20 May 1994

- lower risk of overcharging through indirect routing of journeys;
- lower risk of poor driving skills and accidents;
- lower risk of damage to tourist 'reputation'.

Most of these benefits are not readily quantifiable – however, the anecdotal evidence we have suggests that these reforms are having a positive impact at a cost that does not appear to be substantial enough to deter entry significantly.

9.3.3 Summary of net benefit

We consider that the benefits of restrictions on drivers outweigh the costs. We examine less restrictive alternatives in section 10.

9.4 Net benefits of quality controls on taxi-cabs

9.4.1 Benefits

9.4.1.1 Public and driver safety

Quality controls are often used to satisfy public safety objectives. Intervention may be necessary where there are severe information asymmetries between consumers of taxi-cab services and drivers. Consumers may not have sufficient information to gauge whether drivers and their vehicles are of a reasonable standard. Quality controls effectively remove the need for consumers to be concerned about this aspect of taxi-cab services. If it is very costly for consumers to acquire this knowledge then it is likely that the quality standards will deliver benefits by reducing the risk of accidents and generating confidence in the industry. Certainly in the cruising and rank markets this is likely to be the case. In pre-booked markets, quality provision is likely to be more assured because when calling for a taxi-cab a clearer choice can be made between firms with different reputations for service quality. However, even in this case there may be arguments (discussed in section 9.3) for ensuring drivers and their vehicles are able to meet certain minimum requirements.

Livery and other appearance controls readily allow consumers to identify taxi-cabs that are of the regulated standard. It may be argued this reduces enforcement costs for the Directorate and reduces risks of unregulated vehicles posing as taxi-cabs.

The regulations also address issues of driver safety. These requirements are considered to provide benefits through ensuring that a particularly exposed group has access to technology that may prevent or reduce the impact of crimes on drivers.

9.4.1.2 Consumer protection

Consumer protection arguments for quality regulation largely relate to preventing consumers being exploited by taxi-cab drivers who are unlikely to be punishable. The use of meters provides one way in which this can be avoided, with consumers having knowledge that the fare is appropriately determined for the journey.

9.4.1.3 Increased tourism

A further benefit that arises from quality controls relates to the special role of taxi-cabs in relation to the tourism industry. There is some evidence to suggest that poor taxi-cab services have an impact on the perceptions of tourists and may impose 'negative externalities' on the associated hotel, restaurant and other entertainment industries. Tourists are often in a poor position to choose between taxi-cab services and we consider there are likely to be benefits from ensuring that minimum standards of service prevail.

9.4.2 Costs

9.4.2.1 Higher costs and prices

The following table identifies the costs of quality controls. Our estimation based on the costs provided in the Regulatory Impact Statement for the *Transport (Taxi-cabs) Regulations 1994*, would suggest that quality controls increase costs (and presumably fares) by approximately $2,385 per taxi-cab per year. Over the Greater Melbourne taxi-cab fleet this might equate to approximately $7-8 million per year.

Table 9.1 Estimate of financial costs of quality controls

Item	Total cost	Cost per year (average life of taxi-cab = 4 years)
Cost of livery	$2,500	$625
Signage	$400	$100
Lamps	$35	$8.75
Air conditioning	$1,245	$415
Taxi-cab meter	$950	$237.5
GPS / Dispatch system (incorporates duress alarm)	$4-5,000	$1000-1250
Total	**$9,543**	**$2,385 per year**

Source: Victorian Taxi Directorate (1994)

The cost of age of vehicle restrictions has not been included in this figure. These are less easy to estimate – most taxi-cabs have a life of only four years – but it is likely that the Regulations prevent some vehicles from operating when it would be efficient for them to continue to do so.

9.4.2.2 Reduced product differentiation

A further cost from quality restrictions is that they can often reduce consumer choice – that is, they can prevent consumers from buying the service that they actually want to buy. This might, for example, be a lower quality of taxi-cab service at a lower price. Alternatively, it discourages taxi-cab firms from developing new initiatives to develop a competitive advantage and enhance consumer information, for example, a range of different colour taxi-cabs. This is a potentially important point because vehicle distinctions enhance consumer information in an area where quality recognition is otherwise difficult. Preventing this form of competition may also render other competition on other grounds (e.g. price) ineffective (because consumers would have difficulty distinguishing between taxi-cab companies).

Some of the costs are unlikely to be significant. Where, for example, Australian design standards for safety must be met in relation to vehicles, we would not expect high costs. This might extend to signage restrictions, which give consumers a means of identifying taxi-cabs at a low direct cost.

However, other costs would seem to have a greater impact. When combined with fare regulation, quality controls such as uniform colours effectively prevent operators from differentiating their services from other taxi-cab companies.

9.4.2.3 Enforcement costs

The Victorian Taxi Directorate estimated in 1994 that total enforcement costs were approximately $360,000 per year.[120]

The following table highlights those restrictions identified as major on an individual basis and our assessment of them. Much of the cost information is sourced from the *Transport (Taxi-cab) Regulations 1994.*

[120] Victorian Taxi Directorate, *op.cit.*, p. 11.

Table 9.1 Costs and benefits of taxi-cab quality restrictions

Quality restriction		Costs	Benefits	Balance
Reg.	**Summary**			
Licence / vehicle owner				
Licence conditions	Age of vehicle restrictions	Costs relate to pushing vehicles out of service which are still safe. The magnitude is difficult to estimate, although most taxi-cabs are only used for 4 years on average.	Benefits include easier enforcement of standards (given newer vehicles will generally require less frequent inspections than otherwise); and potentially higher levels of driver and passenger safety.	Age of vehicle restrictions are an indirect way to enforce vehicle quality standards. While there may be benefits in terms of lower enforcement, the burden could shift to allowing taxi-cab owners to prove their vehicles are of an acceptable quality if over age limits.
(r.10)	Must ensure that taxi-cab complies with all the specifications of schedules 2 and 3 of the Regulations	Australian design standards for taxi-cabs appear to only allow large modern sedans (e.g. Falcon and Commodore). Vehicles must carry a minimum of four passengers (not including the driver). This discourages the use of smaller, more fuel efficient vehicles.	Standard size may provide benefits for passengers, particularly tourists and infrequent users, in terms of lowering search costs.	While safety objectives are important, vehicle standards appear to generally require a larger vehicle than would be suggested by safety considerations.
(r.14)	Livery of taxi-cab must be in accordance with that determined by Victorian Taxi Directorate	Physical cost est. $2500 Prevents taxi-cab operators from distinguishing vehicles; hence may reduce competition.	Standard livery may provide benefits for passengers, particularly tourists and infrequent users, in terms of lowering search costs.	Benefits likely to outweigh costs.

(r.18)	Air conditioner must be fitted	Costs minimal – most vehicles have air-conditioning as standard. Running costs depend on whether the air-conditioner is used. Estimated $1,245 cost over life of taxi-cab.	Minimal, unless their use can be enforced.	This regulation appears designed to ensure that customers can have an air-conditioned taxi-cab, although it does not require it to be used (up to the driver). This regulation may be seen as redundant.
(r.35)	Vehicle must be fitted with taximeter	Estimated $950 over the life of the taxi-cab.	Consumer protection, in the sense that meters reduce the potential for exploitation or fraud.	Benefits likely to outweigh costs.
Restrictions on behaviour				
(r.23)	Touting for business is not permitted	May reduce potential for competition in limited aspects.	Drivers and consumers may benefit from reduced conflict, although consumers may suffer from reduced competition (less information on competitors)	Benefits are likely to outweigh costs.

Restrictions on depots and vehicles				
Licence conditions	Taxi-cab must be attached to an "approved depot", which must provide 7-day, 24-hour service	Increases the costs of operating a taxi-cab and operating a depot-communications network. A taxi-cab needs to install roughly $4,000 worth of network equipment: ■ GPS system; ■ Dispatch system. Potential for depots to restrict competition between depot members and between depots.	■ passes some enforcement burden to depots, allows easier enforcement by Directorate; ■ potentially improves service delivery through ensuring that taxi-cabs service 'non-cruising' areas; and ■ driver safety improvements, although it is not clear how often these devices are used.	Imposes significant costs but has moderate potential benefits, ensuring that taxi-cabs are in service more often and safety is increased for passengers and drivers. We have concerns about the restrictiveness of depot approval guidelines, and consider that the proper requirements should not include considerations related to financial viability or a business plan. 24 hour, 7 day service is also not necessary.

9.4.2.4 Requirement to belong to a depot

The requirement to belong to a depot is clearly very significant. In principle the arguments for this restriction do not appear strong. However, we are cognisant of overseas experience, discussed below, that suggests that without this requirement the costs of enforcement spiral (because independent operators may have no fixed address, for example), and driver standards, vehicle productivity and safety fall.[121] Operators enter and converge on high demand areas because they can be guaranteed a fare under current arrangements. If competition at ranks was fully effective, we would expect problems of 'excess entry' to be minimised. Consumers would then be more likely to select a well-known taxi-cab company with a reputation for quality. As long as the requirements for the operation of a depot / network are not too onerous, so that there is a safeguard against excessive restriction of operators by allowing them the opportunity to establish readily new depots, we consider such a restriction may deliver net benefits.

The quality controls on hire cars are in some ways less restrictive but in others place a higher cost burden on the industry (e.g. vehicle requirements, no cruising). We have seen that this has been designed to separate 'taxi-cab' from 'hire car' services. The different quality controls will hence be only justified if it can be shown that the initial entry restrictions on taxi-cabs can be justified. This is discussed under reform options in section 10.

9.4.3 Conclusions

Overall, the quality controls on drivers, depots and vehicles are likely to generate benefits that exceed the costs. On an individual basis the case is less clear but public benefit arguments can be made to support most of these controls (with minor amendments for vehicle standards and age of vehicle restrictions). The other costs of controls tend to be relatively minor and the quality reforms that were recently introduced appear to have community support. The alternatives are considered in the following section.

9.5 Quality controls on other SCPVs

Quality controls on other SCPVs should, wherever possible, reflect the risks that are involved with the provision of service. Hence where a similar service is provided then it should be regulated similarly. This principle will minimise competitive distortion imposed by regulation.

We have noted, however, that consumer sovereignty is likely to be greater with pre-booked services than with services obtained in the cruising market. The actual risks in terms of vehicle quality or driver are likely to be similar, because characteristics of vehicles or vehicle

[121] Seattle, for example, recently passed an amendment in 1997 which forced taxi-cabs to belong to a taxi-cab company with a minimum of 15 cabs to combat these problems.

quality cannot be readily observed, but consumers have greater choice in the selection of an operator. Hence consumer protection arguments are weaker and there should be no requirements for fare control, meters and standard livery. This is reflected in current regulations, however, hire car vehicle standards are regulated to a higher level than taxi-cabs. As noted in the previous section, it is difficult to see why this is the case from a safety or consumer protection point of view. The broad requirement should be that any SCPV should be fit for the purpose it is designed for.

10 Alternatives and reform options

10.1 Introduction

This section of the report considers whether the objectives sought to be achieved by the legislation could be achieved in less restrictive, or more efficient, ways. First we examine examples of interstate and overseas experiences with less restrictive regulation of SCPVs.

10.2 National and international experience with taxi-cab and other SCPV reform

In this section we briefly summarise interstate and overseas experience with elements of less restrictive legislation. We have examined the extensive literature, which is listed in the references. The KPMG discussion paper noted that experiences elsewhere are often not good indicators of what might happen if reforms were introduced in Victoria. Largely this is because various reform packages have been tried in differing circumstances in relation to controls on other public transport, market characteristics (cruising and pre-booked markets) and existing legislation.

10.2.1 Entry deregulation

In looking at entry deregulation (or open entry) we have been careful to exclude situations where entry deregulation has been combined with fare and/or service quality deregulation. These situations will have fundamentally different outcomes from those in which there is open entry with these other controls intact.

10.2.1.1 Northern Territory

In December 1998 legislation[122] was passed in the Northern Territory to remove (public need) restrictions on the number of licences available to be issued to eligible applicants. This was part of a broader rationalisation of the regulation of SCPVs. The Government explained the rationale for these reforms as follows:

[122] Northern Territory *Commercial Passenger (Road) Transport Amendment Act 1998* and *Commercial Passenger Vehicles (Cancelled Licences) Regulations 1998.*

> "There will be no numbers controls on any sector of the industry and public demand will determine how many vehicles will be out there...As a bit of background the government has been concerned for some time about institutional factors and apparent inequities in the passenger transport industry. Taxi-cab licences in Darwin costing around $230,000 were being mostly used as an investment by owners with little interest in the industry...The licences are leased for up to $500 per week. In fact 80% of the Darwin taxi licence owners do not operate taxi-cabs...In addition, it was difficult to ensure that there were sufficient taxi-cabs at all times to meet the demand from the local public, and, in fact, tourists."[123]

Existing taxi-cab licence owners are to be compensated in a lump sum by funds raised from the issue of annual licences, in total amounting to around $27 m. This buyback arrangement may have been facilitated by the fact that nearly 80 per cent of licences were leased or assigned. Vehicles will continue to be required to belong to a network and minimum network sizes have been determined (20 vehicles in Darwin). Fare regulation has been retained but we understand fares are to be reviewed in the near future.

It is too early to determine the success or otherwise of these arrangements. The small size of markets in the Northern Territory does not mean that a similar approach could not be adopted in Victoria. The licence values in the two jurisdictions for metropolitan taxi-cabs have not been that different; only the number of licences issued is significantly different.

10.2.1.2 United Kingdom

The United Kingdom (U.K.) has had a fragmented system of taxi-cab regulation since the first (hackney) taxi-cab regulations were enacted some 350 years ago. Differences in regulation exist between London and the rest of the U.K. London has not had restrictions on the number of taxi-cab licences, although it has strict quality controls including a rigorous driver knowledge test, that to some extent act as entry barriers.[124] The *Transport Act 1985* allowed for partial deregulation of entry in the rest of the U.K., where local authorities control fares and often entry. Many local authorities continued to restrict entry, so the result has been more of a liberalisation than deregulation.

The situation is complicated in the U.K. (and particularly in London) by the existence of "minicabs", effectively, private hire cars, which have only recently been regulated. Liberal entry and quality conditions led to a predominance of these vehicles, particularly in suburban areas. However, there was little quality regulation and subsequent problems with these vehicles emerged, particularly in London. Vehicle and driver standards were highly variable, with serious concerns about public safety expressed prior to the regulation of these vehicles in 1998. However, we note that there has been no attempt in the new legislation to

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[123] Hon. Mr Coulter (Minister for Transport and Infrastructure Development), Second Reading Speech, Commercial Passenger (Road) Transport Amendment Bill, 15 October 1998.

[124] Beesley, M. E. (1979), "Competition and supply in London taxi-cabs" *Journal of Transport Economics and Policy* 13: 102-131.

limit the number of these vehicles; it addresses problems resulting from a lack of quality controls, not too many vehicles. The discussion of the Bill in Parliament was indicative in this respect:

> "Three strands have run through today's debate. It is clear that all Hon. Members regard topographical knowledge, enforcement and vetting of drivers, operators and vehicles as the bedrock of the legislation that is needed."[125]

Nonetheless, the combination of hire cars and taxi-cabs appears to work reasonably well. The taxi-cab has the advantage of being able to cruise and stand at ranks, even though entry costs are higher. Toner's 1996 study of fares across different local authorities found that fares decreased with an increase in mini cabs, but increased with an increase in taxi-cabs.[126] This supports the view that hire cars can provide an important competitive influence on cruising taxi-cabs. Beesley (1994) also provides evidence that suggests that taxi-cabs and hire cars have significantly increased their market share at the expense of other public transport and private motoring.

10.2.2 Entry and fare deregulation

10.2.2.1 United States

Opponents and proponents of taxi-cab reform commonly refer to taxi-cab deregulation in the United States. A large number of cities undertook taxi-cab industry reform as part of a broad move to deregulate the transport sector (including airlines, trucking and rail industries). It is again important to note that the "deregulation" process was not homogenous between cities and that the cities themselves differed quite markedly in terms of size, previous regulatory structure and traffic composition (particularly in relation to the airport trade).

The major sources on deregulation include articles by Teal & Berglund (1987), Dempsey (1996), Frankena and Paulter (1983) and a study by Price Waterhouse (1993) commissioned by the International Taxi Foundation. The VTA commented on United States experience in its submission to this review. Price Waterhouse suggested that of the 21 cities that deregulated in the 1970s and 1980s, six had fully re-regulated with entry and fare controls, two others regulated airport traffic and one enforced minimum standards. The cities that remained fully deregulated were small cities with limited airport traffic.[127] The other writers, with the exception of Frankena and Paulter (1983), were also less than enthusiastic about the results of deregulation.

The problems cited in these articles included:

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[125] Ms Glenda Jackson, Minister for Transport in London, as quoted in Submission of VTA p. 53.

[126] Toner, J (1996), "English experience with deregulation in the taxi-cab industry", *Transport Reviews*, Vol. 16(1), Jan-Mar, pp. 79-94.

[127] Price Waterhouse (1993), *Analysis of Taxi-cab Deregulation & Re-regulation.*

- fares rose in the short run, although in the long run fares in deregulated cities were similar to the industry as a whole;
- there was a large increase in the number of taxi-cabs, which did not increase service or productivity because these taxi-cabs tended to congregate at well-serviced areas such as the airport;
- higher rates of trip refusals and no-shows;
- older vehicle fleets and lower vehicle standards;
- lower productivity (less trips per taxi-cab); and
- higher administrative costs for enforcement agencies.

However, in relation to these points we note the following:

- most of these cities deregulated both fares and entry, and often reduced (or had lower existing) quality controls and poor enforcement of these;
- often deregulation of fares was accompanied by fare adjustments which were due or delayed under regulation;
- licence values were not nearly as high in U.S. cities as they are in Victoria currently;
- cities that had the most problems tended to attract a large number of "independent" operators (free of depot control);
- many of the problems referred to indicate either lax quality controls or poor enforcement of those controls; and
- open entry policies are still maintained in most of the 21 cities, as long as requisite quality standards are met.

We would therefore caution against comparing the specific experience of the United States to reforms if they were applied to Victoria.

10.2.2.2 New Zealand

The New Zealand experience is often cited as having great relevance to Australia, and has been cited by sources from both sides of the taxi-cab regulation debate.[128] The reforms in New Zealand, passed in the *Transport Services Licensing Act 1989*, basically consisted of:

- unification of all passenger service vehicles for regulatory purposes, which replaced the separate licensing of taxi-cabs to other passenger service vehicles;
- a removal of quantitative restrictions on the number of vehicles previously licensed as taxi-cabs;
- a removal of fare controls, which were replaced by requirements for taxi-cab companies to post their own fare schedules, and that these be registered with the local authority;
- a requirement for a taxi-cab to belong to an approved taxi-cab company / depot;
- a limiting of quality control measures to an ordinary driver's licence and vehicle controls (e.g. meters, taxi-cab signs).

The effect of the regulations can be broadly summarised as follows:

- the number of taxi-cab drivers and vehicles increased substantially in most areas. Figures from the Land Transport Safety Authority (LTSA) indicate that:
  - prior to 1989 there were 2,567 licence holders, belonging to 107 taxi-cab organisations and operating 2,742 taxi-cabs;
  - in 1998 the number of taxi-cab organisations has increased to 180, and the LTSA estimated that there were approximately 4,000 taxi-cab service operators. There were 6,903 vehicles registered as taxi-cabs, although it is estimated that about 1,000 of these vehicles would be used for non-taxi-cab work, such as limousines and shuttles;[129]
- fares are lower in real terms than they were in 1989, although there is considerable variation in fares between taxi-cab companies. Comparisons made in Morrison (1997) which showed that real fares had fallen in Wellington were supported by four surveys of fare changes in Wellington since deregulation[130]; and

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[128] See Gaunt (1996) reference in appendix B for a positive view, and Brokenshire (1994) reference for a less positive one.

[129] Land Transport Safety Authority (1998), *Transport Services Operator Licensing Review – Discussion Document*, p. 37.

[130] Morrison, P.S, *op.cit*, p. 923.

- there were problems with driver controls, which led to the re-introduction of topographical tests and driver identification cards, with additional powers given to enforcement officers to remove non-complying drivers or vehicles.[131]

An important feature of deregulation in New Zealand was the regulation of radio companies and insistence that they provide 24-hour service. Drivers had to be attached to a radio company. Depots can require new entrants to pay substantive sums for goodwill, in effect a transfer to the depots of a portion of the licence value which previously existed when entry to the industry was restricted. Regulation was introduced at airports to control the sudden increase in the number of taxi-cabs and consequent behavioural problems (refusal of short trips, fights between drivers).[132]

Reform to the taxi-cab industry was accompanied by a broad change in transport regulation more generally. Large commercial passenger vehicles were also deregulated in New Zealand. For an urban bus service, buses must follow set routes according to a timetable, and charge set fares. They comprise services that are provided on a commercial basis and those contracted to regional councils, involving subsidies from the government and ratepayers. There is flexibility in relation to the type of vehicle that can be used. This might involve a mix of taxi-cabs, vans, minibuses and midi-buses.[133]

There is evidence that the industry has been able to adapt to the new deregulated environment by providing a range of different services, including:

- public transport services;
- different vehicle types (often with seating capacity of 10-20 people);
- mail deliveries under contract from NZ Post.[134]

A further important feature of deregulation has been the introduction of competition at ranks. Evidence suggests consumers and drivers in New Zealand have adapted to a competitive selection process (see section 10.5.1).

In conclusion, Morrison noted:

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[131] *ibid.*, p. 923-4 .

[132] *ibid.*, p. 919.

[133] Land Transport Safety Authority (1998), *op.cit.*, p. 37.

[134] Brokenshire, Ian (1994), "The New Zealand Taxi Industry – Four and a half years after deregulation", 1994 Australian Taxi Conference, *Taxi*, Vol. 40, No. 2.

> "At the same time, in light of the ability of many more taxi-cab drivers to earn a living from the industry, it is tempting also to conclude that abnormally high profits *were* being made prior to deregulation. Although anecdotal evidence has many current operators struggling and having to work much longer hours to make ends meet, there are also reports of companies able to upgrade fleets and to make other substantial investments as well as some drivers reporting more than satisfactory returns."[135]

Overall, the evidence appears to suggest that the New Zealand experience of deregulation has been a positive one.

10.2.2.3 Sweden

Sweden is another country that has moved to deregulate its taxi-cab industry (1991). However, the previous regulation and industry structure in Sweden were vastly different to Victoria today. There were 7,500 taxi-cab companies operating about 12,000 taxi-cabs, with all operators required to belong to a network. The changes to the regulations included:

- removal of entry restrictions;
- removal of fare controls, but companies were required to inform customers of fares and issue receipts from meters;
- removal of controls on taxi-cabs belonging to radio booking centres;
- removal of geographic restrictions on operation; and
- removal of operating hour restrictions.[136]

The results were similar to those reported above. There was an increase in the number of taxi-cabs, although fares rose sharply (this was mostly due to the introduction of a 25 per cent VAT), customer waiting times fell and there were falls in vehicle productivity (as measured by trips per vehicle).[137] A 1994 analysis of deregulation in Stockholm suggested that while prices to consumers rose, it was likely that lower waiting times led to user gains in excess of losses to taxi-cab operators.[138] However, high licence values do not appear to have been a significant feature of pre-deregulation Sweden.

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[135] Morrison (1997), *op.cit.*, p. 925.

[136] Garling, T., T. Laitila, A, Marell and K. Westin (1995). "A note on the short-term effects of deregulation of the Swedish taxi-cab-taxi-cab industry" Journal of Transport Economics and Policy 29 (2): pp. 209-210.

[137] *ibid.*

[138] Burdett & Folster, *op. cit.*

10.2.3 Service quality deregulation

There have been few cases where there has been no regulation of drivers and vehicles on quality grounds. Some of the few examples of quality deregulation occurred in cities in the United States as part of reforms referred to earlier. Often driver knowledge tests or vehicle controls were removed as part of broader reforms. However, it would be fair to categorise these moves as unsuccessful. The VTA submission provides a broad range of evidence from United States cities which suggests that driver knowledge tests and vehicle controls are essential if the taxi-cab service is to meet efficiency objectives.

New Zealand also removed some quality controls as part of the review of licensing in 1989. We note that some of these were re-instated (such as the knowledge test for taxi-cab drivers), and in a recent document the LTSA examines proposals to strengthen controls in relation to:

- consistency in appearance of signage;
- schedules of fares and charges (standardisation);
- prescribing the location of driver identification cards;
- providing a central register of complaints; and
- forbidding smoking.

Boot lock release devices and child restraints are also discussed.[139]

This evidence would tend to point to a continuing trend towards greater quality controls, particularly where entry to the industry has already been deregulated.

10.2.4 Conclusions

We are hesitant to recommend strong conclusions from this survey of evidence. Nonetheless it does appear that:

- deregulation of fare and entry controls has not always produced satisfactory results, in the sense of delivering lower prices and lower waiting times, particularly where quality controls have been weak;
- removal of entry controls has not occurred in cities where licence values have been comparative to the level of current values in Melbourne (which provided less scope for fares to fall);

[139] Land Transport Safety Authority (NZ), *op.cit.*.

- removal of entry controls with fare regulation can work well provided quality controls are sufficient;

- competition works better in the pre-booked than in the cruising market.

In summary, we do not consider there is evidence that contradicts earlier discussion that:

- there is a lack of competitive pricing pressure in the taxi-cab industry (particularly in the cruising market) which can lead to higher prices under deregulation;

- large increases in entry are a result of fares that are inefficiently high, whether set through regulation or industry interaction; and

- enforcement of quality controls is necessary for ensuring that service standards do not fall.

10.3 Small commercial passenger vehicle regulation models

This section discusses possible options for reform to the regulation of SCPVs. The aim is to ensure that the objectives of the legislation are achieved in the most efficient way. In our analysis we distinguish the booking and cruising markets and analyse the options for reform which flow from the entry, price, inter-modal and quality restrictions discussed. We have attempted to present the options as part of an "integrated solution". This takes account of the fact that the regulations are often interrelated. Removing single restrictions without taking into account the impact of others is not sensible from an efficiency or public policy perspective.

At one end of the spectrum lies total deregulation – the removal of fare, entry, quality control and inter-modal restrictions. At the other end of the spectrum is the current situation, with a combination of all restrictions identified. In between is a range of options which use certain restrictions while allowing for less restrictive regulation in other areas. We use this framework to analyse the regulatory system as a whole as well as identifying specific alternatives to restrictions identified. Table 10.1 provides an overview of possible regulatory reform options.

Table 10.1 Overview of regulatory options

Model		Entry regulation		Price regulation	Service quality regulation
		Pre-booked	Cruising / rank		
Option 1	*Current model*	✔	✔	✔	✔
Option 2	No industry specific regulation				
Option 3	Open entry, no fare setting				✔
Option 4	Open entry, fare setting on taxi-cabs			✔	✔
Option 5	Partial Open entry (hire cars, SPVs, RHVs), fare setting on taxi-cabs		✔	✔	✔

These options do not consider certain combinations:

- restricting entry with quality controls, but no fare regulation; and
- entry and fare controls with no quality controls.

Restricting entry without regulating fares is likely to lead to monopolistic (or oligopolistic) pricing. The only constraints on pricing would come from 'within the market' of other licence holders, and with the inelastic nature of demand and high depot concentration it is highly likely that taxi-cab operators would raise fares.

We do not consider the second combination because of the likely result of option 2 below (see 10.3.2 below).

10.3.1 Option 1 – Status quo

The first option would be to maintain existing regulations. As discussed in the previous sections we have rejected this model because:

- there is significant evidence that the current combination of entry restrictions and fare regulation has led to inefficient outcomes, resulting in high fares and licence values;

- entry regulations have contributed to the reduced availability of taxi-cabs and higher waiting times, particularly in peak periods and during special events, and for certain groups such as the disabled;

- there has been little evidence presented to this review that the existing restrictions on competition are generating public benefits; and

- there appear to be few non-regulatory incentives for taxi-cab operators to increase the quality of vehicles or drivers, implying that regulation is likely to be a permanent and growing feature of this system.

The benefits from the existing set of regulations are considered to be outweighed by the costs.

Table 10.1 looks at the impact of the existing arrangements, and comparative tables are provided for the other options. In most cases we see that the primary beneficiaries of the closed entry regimes are owners of licences (whether taxi-cab or hire car) while consumers are the primary losers. Taxi-cab operators (assignees) are worse off because they must pay assignment fees that can approach 30 per cent of net vehicle income.[140]

We see taxi-cab drivers as losers under the present regime. The '50/50' meter arrangement reflects the higher costs of vehicle / licence owners,[141] and is inflexible. Swan (1979) notes that an increase in taxi-cab numbers would tend to reduce the takings of each taxi-cab, and for a given percentage of the gross would reduce driver earnings. However, this percentage is not immutably fixed. This percentage is determined by the need to keep existing drivers in the industry and to attract new ones as well; hence, the driver's share of takings should rise in response to an increase in taxi-cab numbers and increase in job opportunities.

[140] Confidential submission.

[141] because the 50% for the vehicle / licence owner must contribute to recovering the return on the licence.

Table 10.1 Impact of existing legislation and regulations

Affected parties	Impact (Positive / Negative) (Large/Medium/Small)		Source of Impact (compared to existing regulation)
Licence owners	+	Large	High fares, licence values
Taxi-cab operators	-	Medium	High assignment fees
Taxi-cab drivers	-	Small	Low remuneration
Regulator	+	Small	Low political pressure, relatively low enforcement
Consumers	-	Large	High fares, higher waiting times
Balance	**-**	**Medium/Large**	**Static, dynamic efficiency losses**

10.3.2 Option 2 – Deregulation of entry, fares and quality controls

This model would encompass:

- full open entry of all market participants – taxi-cabs, hire cars and other SCPVs into cruising and pre-booked markets;
- removal of all fare controls; and
- no regulated quality standards.

This option would remove all industry specific regulation from the SCPV industry. The industry would then just be governed by general legislation such as the Trade Practices Act and Fair Trading Act.

In practice we see that this option would fail to meet the objectives of the legislation in a more efficient manner. Quality standards (encompassing occupational and vehicle quality regulation) are an essential feature of taxi-cab service markets around the world. The limited experience with quality deregulation (from New Zealand and the United States) suggests that most jurisdictions re-regulate to ensure that objectives of public safety and consumer protection are met. Our analysis of market failure also suggests there is a need for quality regulation in this industry.

Table 10.1 shows the potential impact of removal of all industry specific regulations. We would expect that the lack of quality controls would cause a tendency towards lower quality service, which may cause problems with consumers and result in lower demand (if taxi-cab operators cannot convince consumers of vehicle and driver quality). Lower prices may result, although this is not certain.

The impact of deregulating entry and fares is considered in the following options.

Table 10.1 Impact of open entry, no fare regulation, no quality regulation

Affected parties	Impact (Positive / Negative) (Large/Medium/Small)		Source of Impact (compared to existing regulation)
Licence owners	-	Large	Loss of licence values, reduced demand
Taxi-cab operators	-	Medium	(Likely) lower demand
Taxi-cab drivers	-	Small	Lower remuneration
Regulator	+	Small	Lower enforcement
Consumers	-	small	(Likely) low quality service, little fall in fares
Balance	**-**	**Medium**	**Effect depends on severity of information asymmetries**

10.3.3 Option 3 – Open entry, no fare setting, regulated quality

This option looks at a system where:

- there is full open entry into the cruising and pre-booked markets;
- there are no fare controls on taxi-cabs, or on other vehicles; and
- there are regulated minimum quality standards.

This option would involve open entry to all classes of vehicle, and an amalgamation of types of vehicles into taxi-cabs, which would operate both in the cruising and pre-booked markets, and hire cars, which would operate as pre-booked vehicles only. The mechanics of this system could be similar to the New Zealand model. Passenger transport vehicles could be regulated similarly, with taxi-cabs having to undergo stricter quality controls to address the more apparent public safety and information asymmetry issues in the cruising market. These licences would be issued 'as of right', as long as the requisite safety and driver standards were met. Restrictive licence conditions, which limit other SCPVs to specific functions (e.g. weddings) or require passengers to be returned to the same place as the journey commenced (motorcycles), would be removed.

Fare deregulation does not necessarily imply a removal of all restraints. In New Zealand, fares must be pre-determined by taxi-cab companies who have to register these with the local

authority. This prevents price-gouging in situations where demand far exceeds supply (e.g. at airports at certain times). Hire cars and other vehicles that operate in the pre-booked market would not be subject to fare regulation. We are concerned about the existing level of fares and would be keen to ensure that if restrictions on licence numbers were removed, prices actually fell. While not considered a long-term problem, in the transition to a functioning, competitive taxi-cab market (in which consumers choose cruising taxi-cab services) fare regulation might be required to ensure efficient fares are charged.

The existing quality regulations would be maintained under this system, and could even be strengthened to assist in enforcement. This is because under open entry we could expect more vehicles and an increased enforcement burden.[142] Incentives to cut costs may also become stronger.

We see major benefits from this approach. With very high assignment fees removed from the industry (some $33 million annually), the costs of operation for at least half of the industry would drop. This creates potential for fares to fall. We would expect that if fares were regulated to something like the efficient cost level, entry would not occur on the same scale as experienced in overseas jurisdictions. Hence vehicle productivity would not fall as far as might otherwise be expected. Quality controls (e.g. driver knowledge tests) and, possibly, a requirement to belong to a network also reduce superfluous or short-term entry as was experienced overseas. Drivers would find that if they could afford to own a vehicle they would no longer have to split fares with vehicle operators under a lease agreement. Greater rewards would also be available for drivers who can provide higher quality, higher margin services.

Compensation issues, which are discussed in section 10.5, are also important to this option. The loss of licence values creates equity issues that may require the beneficiaries of reform to compensate the losers. However, the appropriate compensation (whether full or partial) and the method of compensation are difficult to determine.

Service refusals have been noted as a concern in overseas jurisdictions that have deregulated entry into passenger service markets (particularly the Price Waterhouse 1993 survey of United States deregulation). Zoning of taxi-cabs would, of course, be eliminated. In principle, the market solution to the service problem is quite simple – those parties who incur higher costs of transport pay higher prices. Hence, a consumer might have to pay more in an isolated area to reflect the higher costs of a vehicle making the journey to that location.

Whether, in fact, the consumer would have to pay more would depend on the exact circumstances. For example, it may be that the local operators could easily respond to the call. Under this option, the Government could achieve broader equity goals through subsidisation of consumers, perhaps similar to that already done under the Multi-Purpose Taxi Program.

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[142] Price Waterhouse (1993) estimated that the increase in vehicles in the United States was approximately 23% after deregulation.

Table 10.1 Impact of open entry, no fare setting, regulated quality

Affected parties	Impact (Positive / Negative) (Large/Medium/Small)		Source of Impact (compared to existing regulation)
Licence owners	-	Large	Loss of licence values (depends on compensation arrangements)
Taxi-cab operators	+	Medium	Lower assignment fees, more competition (-ve)
Other SCPV operators	+	Small	Increased business viability (fewer service restrictions)
Taxi-cab drivers	+	Small	More drivers, more employment, no longer have "50/50" arrangement if own vehicle. Good quality drivers benefit, lower quality drivers may lose.
Regulator	-	Small	Higher enforcement costs
Consumers	+	Medium / Large	Lower fares on average, lower waiting times, greater choice of vehicle (depends on compensation arrangements)
Balance	+	**Small**	**Effect of compensation arrangements is important to overall impact.**

10.3.4 Option 4 – Open entry, fare setting, regulated quality

This option looks at a system where:

- there is full open entry into the cruising and pre-booked markets;
- there are fare controls on operators in the cruising market (taxi-cabs), but not on other vehicles; and
- there are regulated minimum quality standards.

This model builds on the notion that there are likely to be problems with fare-setting if controls are removed. While the Industry Commission (1994) and Trade Practices Commission (1993) have both previously argued against fare controls, we consider the evidence is not conclusive on this matter:

- there are likely to be problems of short run monopoly power or exploitation of consumers if drivers are not prevented from raising fares in particular situations (e.g. at the airport or where there are large numbers of customers);

- costs in acquiring information about fares would potentially be high, although information disclosure may be encouraged in a competitive market; and

- the way the industry works currently discourages competition at ranks (it would allow a 'posted' price to be higher than if competition was effective).

Whether or not to maintain fare regulation depends essentially on how effective this regulation is likely to be. We consider fare regulation to have been inefficient in the past. If regulation cannot be made more effective we consider the case for deregulating fares to be strong. There is a strong case for moving the regulation or oversight of fares from the Taxi Directorate to an independent, expert economic regulator, such as the Office of the Regulator-General (ORG). The ORG has broad price regulation experience and is less likely to be influenced by industry pressure that often accompanies price regulation.

Generally, under this option we would favour depots setting fares for cruising taxi-cabs with the compulsory use of meters. This would be subject to oversight from the regulator, who would assess the 'reasonableness' of the fare. Firms would be required to set fares according to their approved meter rates, although they would also be permitted to offer discounts off their metered rate. Fares in the pre-booked market would not be regulated. Taxi operators would also be required to display their fares on and in all taxis, to enhance information available to consumers.

There is potential for fare regulation to create problems in relation to service delivery in an open-entry licensing regime. If average pricing does not account for the higher costs involved in serving some customers, then we would expect the incidence of service refusal to increase. However, it might be expected that the likely result of open entry would be similar to the greater London area. Cruising taxi-cabs, with an obligation to service all customers at a regulated price, dominate the city and inner suburbs while hire cars (whose fares are not regulated) service the outer areas where demand is lower. Consumers in less dense areas may pay higher fares than at present. This suggests that a desirable accompanying measure would be to remove all zoning restrictions, and allow the market to determine fares where population densities are not sufficient to ensure a ready supply of taxi-cabs.

While we recommend under this option that quality controls remain, one further possibility might be to ensure tighter quality controls on cruising taxi-cabs so that drivers are of a high standard. Entry controls would be reduced on vehicles but would tighten on drivers (also increasing wages). This might allow a higher price, higher quality taxi-cab service (which could be useful for tourists and those with limited market knowledge) to co-exist with a lower quality, lower price hire car sector (compared to current standards).

Table 10.1 Impact of open entry, fare regulation, service quality regulation

Affected parties	Impact (Positive / Negative) (Large/Medium/Small)		Source of Impact (compared to existing regulation)
Licence owners	-	Large	Loss of licence values (depends on compensation arrangements)
Taxi-cab operators	+	Medium	Lower assignment fees, more competition (-ve)
Other SCPV operators	+	Small	Increased business viability (fewer service restrictions)
Taxi-cab drivers	+	Small	Possibly more drivers, more demand for drivers, no longer have "50/50" arrangement if own vehicle.
Regulator	-	Small	Higher enforcement costs
Consumers	+	Medium / Large	Lower fares on average, lower waiting times, greater choice of vehicle (depends on compensation arrangements)
Balance	+	**Medium**	**Effects of compensation arrangements are important to overall impact.**

10.3.5 Option 5 – Partial open entry, fare regulation, quality regulation

Another option is to look at a system where:

- there is open entry just into the pre-booked market;
- there are fare controls on cruising taxi-cabs, but not on other vehicles; and
- there are regulated minimum quality standards.

This effectively segments the cruising market from the pre-booked market, although it would still be possible for taxi-cabs to service both markets. In part this model reflects the notion that deregulating entry is more likely to have a beneficial outcome in the pre-booked market (approximately 50 per cent of the total market served by taxi-cabs). It would reduce the impact on taxi-cab licence values and hence make the transition to full competition more manageable, and therefore financially palatable. Other controls would remain, although fares would not be regulated in the pre-booked market.

The experience in Adelaide, which removed quantity controls on hire cars in 1991, is examined in Box 10.1.

Box 10.1 Deregulation of entry of hire cars in Adelaide

Quantity limits on Adelaide's hire cars were removed in 1991. At that stage there were 50 hire car licences, compared with approximately 850 taxi-cab licences in the Metropolitan area. Since that time the number of hire cars has increased to approximately 600. Informed estimates of the number of hire cars operating on a full time basis range from seventy (a modest estimate from a taxi-cab source) to 200 (a Government source).

While the competition from hire cars, combined with a 10 per cent increase in taxi-cab licence numbers, has certainly aroused hostility among Adelaide's taxi-cab operators and drivers, hire cars do not appear to have captured a significant market share, even with their perceived advantages.

The South Australian legislation defines taxi-cabs as having certain exclusive rights; the right to be called a taxi-cab, the right to have a meter, the right to pick up from the street and the right to ply for hire on the street. Similar to Victoria, hire cars are confined to pre-booked work. Prior to deregulation of hire cars, it was commonly estimated that between two thirds and three quarters of taxi-cab work was dispatched by radio. The remaining 25 per cent (or more) was not open to competition. But other factors restraining competition may be more significant:

- The image of a taxi-cab as a strictly regulated service appeals to many, particularly those who use taxi-cabs rarely. In particular, the knowledge that the fare is regulated by Government to be "reasonable" will be a comfort to those who simply do not know how much they should expect to pay.
- The Passenger Transport Board (PTB), which was established in 1994, has used its regulatory powers to dampen competition, for example requiring applicants for accreditation to produce "business plans". It is widely believed that business plans that present the service as competing with taxi-cabs will be frowned upon. Regulations passed in 1998 have the effect and possibly the intent to restrict competition. Hire car vehicles are now required to have six cylinders or more, and a wheelbase of at least 2.8 metres. They must also be a "higher class of vehicle". Owners of hire cars that compete with taxi-cabs (judged by the number of kilometres travelled each year) must also pay an administration fee of $211 per year, plus $1000 per year for each vehicle. "Traditional" hire cars (using classic or vintage vehicles) must charge at least $20 a trip.
- The fleet size of the hire car companies has also inhibited competition. Adelaide's taxi-cab industry is dominated by three radio companies, each with over 300 taxi-cabs. Average response time for pre-booked work is about six minutes. The largest hire car company franchises possibly seventy or so vehicles. This means that the hire cars cannot routinely provide such a fast response as the taxi-cabs and have to rely on booking some time ahead to maintain their reliability.

The deregulation of hire cars in Adelaide provides an interesting example of the benefits of competition in this market segment. It would have been more interesting to see the results if the PTB had not restricted competition between taxi-cabs and hire-cars. Nonetheless, this provides some evidence that the taxi-cab industry will not 'collapse' if restrictions on hire cars are removed.[143]

The regulation of non-taxi-cab SCPVs could be of several different forms. A preferred approach would be to relax entry controls on all pre-booked vehicles (an 'as of right'

[143] Indeed taxi-cab licence prices have continued to rise, from $120,000 in 1991 to $155,000 at the end of 1998.

category) which would become a single licence category. Licence conditions on the type of work able to be undertaken would be removed, as long as they do not ply for hire or sit at ranks in direct competition with taxi-cabs. Taxi-cabs could retain their unique yellow livery.

It is not certain what would happen to entry controls on cruising taxi-cabs under this model. Fundamentally, under this option we are assuming that open entry is either not feasible or desirable in cruising markets. However, there are still arguments for increasing the number of licences. Many submissions provided proposals along these lines; that is, for the issuing of a limited number of new licences. There are two basic methods of licence issue; an 'ad hoc' approach or a rule-based approach (for example, issuing licences according to population ratios, licence values or other demand related factors). There are weaknesses with both approaches. 'Ad hoc' approaches tend to attract intense lobbying from industry groups. Rule-based approaches have the advantage of being non-discretionary, but choosing the measure by which to increase licences is problematic. Industry lobbying then focuses on the measure of 'taxi-cab demand'. There is also no recognition that the current number of licences may be far from optimal.

Similar to the previous options, zoning restrictions would be removed under this option. Experience in Adelaide and the U.K. suggests that hire cars will cover markets where there is insufficient population density for taxi-cabs to operate.

Differential vehicle restrictions would largely be removed, with hire car standards similar to taxi-cab standards in relation to vehicles and drivers where similar services were provided. Taxi-cab companies would continue to belong to a network, which imposes costs that are somewhat balanced by the right to ply for hire. Other quality controls on taxi-cabs and hire cars would remain.

While there are likely to be net benefits from this regulatory approach, we consider that they are likely to be smaller than under option 4. Consumers will benefit from a wider variety of service at lower prices, but the effect of quarantining the cruising market reduces benefits and has the effect of reducing taxi-cab licence values 'by stealth'. It may therefore be seen as inequitable by existing licence owners.

Table 10.1 Impact of partial open entry, partial fare regulation, quality regulation

Affected parties	Impact (Positive / Negative) (Large/Medium/Small)		Source of Impact (compared to existing regulation)
Licence owners	-	Medium	(Smaller) loss of licence values
Taxi-cab operators	+	Medium	Lower assignment fees, more competition
Other SCPV operators	+	Small	Increased business viability (fewer service restrictions)
Taxi-cab drivers		Neutral	More demand for drivers, more vehicles
Regulator	-	Small	Higher enforcement costs
Consumers	+	Medium	Lower fares, lower waiting times in pre-booked market Higher quality services available
Balance	+	**Small**	

10.4 Quality of service restrictions

We have noted above that removal of quality of service restrictions is not likely to be in the public interest. However, it may also be possible to ensure quality of service without resort to regulation, that is, there may be less restrictive alternatives that achieve the objectives of the legislation.

One option could involve an information disclosure regime and reliance on general consumer protection provisions. However, it is evident that it would be rather costly for consumers to analyse service and quality information, particularly in cruising markets, and that enforcement of consumer protection provisions at general law can be both expensive and time-consuming.

Another option might be to introduce an industry code of practice. This could potentially remove much of the regulation from the Victorian Taxi Directorate and place more emphasis on the industry 'policing itself'. Codes of practice only tend to work well where there is ability to enforce and punish violations of the code through industry measures. Where minimum standards are required to apply to all operators in an industry, self-regulation is generally not desirable. [144] In this case the depots are in a position to ensure compliance, but

[144] See Hon. Warren Truss, MP, Minister for Customs and Consumer Affairs, *Codes of Conduct Policy Framework*, March 1998.

may be reluctant to do so in relation to owner members. Given the power of the depots in the industry and their limited numbers we are loathe to suggest they be given a greater self regulatory role as a substitute for government regulation.

10.4.1 Alternatives to driver regulation

The review of driver regulation in section 9 found that the benefits of these restrictions outweighed the costs. However, it is apparent that the current system could be improved in terms of the efficiency and fairness of regulation. Particularly, the current discretionary nature of the certification process introduces an element of uncertainty into the regulation of drivers. There are two main issues here; the first is the initial requirement to obtain a certificate; and second is the conditions under which certificates are suspended or revoked. In general we are less concerned with the first of these issues, with the recent training measures seeming to attract little opposition from drivers or other sections of the community.

The second issue is more of a concern. Currently, although certain offences are specified in the regulations, the requirements for revocation or suspension of that licence are less clear. Section 157 of the Act specifies that the licensing authority may revoke a certificate if it is satisfied that due to the frequency of; wilful commission of; or the danger to the public as a result of the breach of the conditions of the certification, the certificate should be revoked. Regulation 6 (3) of the Taxi-cab Regulations also states that "A person must not breach any condition set out in the driver's certificate." The current process can also be subject to appeal in the Victorian Civil and Administrative Tribunal or the Magistrates' Court (s. 157(4)(a)).

A preferable system, which would remove much of the discretionary element in the revocation or suspension of licences, would be a 'driver demerit points' system. Breaches of certificate conditions and regulations would result in set penalty points, with cumulative totals automatically enacting suspensions or revocations. For example, a total of 10 demerit points over the course of 2 years might result in a one month suspension, while a total of 20 points could result is certificate revocation. Certain serious offences could invoke automatic revocation. We consider that such a system would be fairer to drivers and result in more efficient enforcement of regulation.

10.5 Impediments to reform

10.5.1 Transitional problems

When regulatory and market structures become well entrenched, reform is invariably difficult. The entrenched parties typically have interest in promoting the difficulty of reform, while consumers may take time to adjust to a new system of purchasing taxi-cab services. In relation specifically to the deregulation of SCPVs, it is argued that full and effective competition is hampered by certain features of markets as they currently operate:

- "first in, first out" rules at ranks (whether by regulation or convention) prevent customers from choosing between different taxi-cabs;
- the appearance of taxi-cabs is regulated in terms of colour and signage; and
- there is no real choice if there are not a number of taxi-cabs at a rank.

To identify the significance of these problems after deregulation, we contacted the Land Transport Safety Authority in New Zealand, who indeed noted that there were some transitional problems associated with the operation of ranks, particularly at airports. Drivers were known to hassle prospective customers, and heckle among themselves. This was accentuated by a physical problem with many ranks, which prevented a chosen taxi-cab from pulling around a taxi-cab in front. However, the LTSA noted that with enhanced enforcement, and removal of such barriers where they existed, the new rule was gradually complied with and the problem disappeared.[145]

The LTSA also noted that it took on more of an informative role than under the previous regime. Information on taxi-cabs is widely distributed, including an advertisement in the Yellow Pages, to better inform consumers of their rights. It also noted that customers have become used to choosing taxi-cabs and taxi-cab companies on the basis of quality of driver and the appearance of the taxi-cab, as fares do not greatly vary across taxi-cab companies. Those who are regular customers tend to look for taxi-cabs belonging to a particular company. Information should also be provided to new entrants. In Tasmania, current and intending taxi-cab operators are issued with a 'taxi-cab pack' which provides information on both the legislative and operational aspects of taxi-cab operation.

A further problem is described by Tullock (1975), who notes that the profits to licence owners that accrue over the years are 'transitional'.[146] Profits become capitalised in licence values, which means that taxi-cab operators who enter the system after buying a licence make only normal profits (if licence values remain constant). Hence it becomes extremely difficult to penalise existing licence owners (through capital losses) if open entry is introduced. The optimal solution would be to tax those who benefit from free entry and pass this to existing licence holders as compensation. Of course, to identify the beneficiaries from open entry is extremely difficult, because no one would have incentive to reveal benefits accruing to them. We now look at compensation issues in the light of this basic imperfection.

[145] Land Transport Safety Authority (New Zealand) personal communication.

[146] Tullock, G., "The Transitional Gains Trap", *Bell Journal of Economics and Management Science*, Vol. 6 (1975), pp. 671-678.

10.5.2 Compensation issues

The great difficulty with introducing open entry systems is how to deal with existing licence values when new licences are issued.[147]

A 'hard-line' approach might suggest that compensation for existing licence holders is not required; as:

- licence owners have collected monopoly profits since owning the licence;
- licences are also subject to capital risk, similar to other assets; for example, if fares were simply reduced then licence values would fall with no attendant compensation; and
- there has also been knowledge of this review for some time, since the signing of the Competition Principles Agreement in 1995, and the merits of taxi-cab reform have been well debated over the years.

It might then be argued that new entrants and existing licence owners have been well aware of the risks associated with holding taxi-cab licences. It may in fact have pushed licence values and assignment fees higher as existing licence holders tried to capture higher returns prior to (inevitable) deregulation.

However, it is also clear that many of the existing licence owners will not have made excess profits on their licences; as we have noted, the future rents available become capitalised in licence values. The licence values are also so large that there are serious equity issues associated with a large fall in value, if, for example, the licence has been used as security on a loan.

If we decide to deregulate entry into the cruising and pre-booked markets, it might therefore be suggested that the transition to a more competitive system should be managed. Note that the ultimate goal of this change (entry to any person who meets specified minimum vehicle and driver standards) should be kept in mind. Options might include:

- A sustained release of taxi-cab licences (say 10 per cent a year) which could be tendered and proceeds returned to licence owners, until demand is exhausted;
- A tender of licences (say 10 per cent a year) for 2 years, followed by sale of those licences at this 'market' price;
- An immediate deregulation of hire cars, followed by a move to deregulation of cruising taxi-cabs after a number of years using a similar percentage release format; or

[147] Note while our example below refers specifically to taxi licences, we would envisage that all licences (taxi, hire car and SPV) would be repurchased by Government prior to the introduction of open entry.

- A Government repurchase of licences, funded from Consolidated Revenue, an annual licence fee[148] or consumer levy[149]; or some combination of the three; and a direct move to an open-entry licensing scheme.

The first option perhaps implies no financial obligation on the Government or community but is likely to invite on-going opposition from the industry.

Only the second option appears able to avoid the compensation issue, because it would limit the effect of new licences on the market price (which is effectively capped). However, it also offers the least benefit to consumers, because fares would always be higher than necessary to cover the capital costs of the licence.

Government repurchase of licences would involve substantial amounts, in excess of $1 billion for SCPVs in Victoria as a whole. While this could be funded by general tax-payers, we are more inclined to consider that taxi-cab users should, in effect, fund this through existing fares. Government could, for example, recover the buy out costs through an annual licence fee roughly equivalent to current assignment values. This would mean that the benefit of lower fares would be deferred until the amount of the buyback was fully compensated and the net cost to the taxpayer was zero.

The costs and benefits of 'buying out' licence owners

As part of the consideration of this option, we examined the cost-benefit decision with respect to the Government 'buying out' the licences and recovering the required payments in annual licence fees, similar to the Northern Territory model. Following our analysis in section 6.3.5.1, we see that the benefit from buying out licences is equivalent to the gain in consumer surplus over time, while the cost is the loss of producer surplus over time. In a static sense we know that the gains of reform will outweigh the losses – however, when time considerations and discounting are taken into account this may not be the case.

Table 10.1 examines the potential benefits of the Government buying out Greater Melbourne area taxi licences at current values. The total cost of this is estimated to be $860m[150], while the benefits are based on a gain of consumer surplus of $72m per year. If no time discounting is used we could expect the benefits of the licence buyout to outweigh the costs in year 12. However, discounting of future benefits implies that the payback will take longer than this. The following table assumes a total buyback of licences in year 0.

[148] say a $20,000 annual per vehicle licence fee for 20 years, depending on the number of entrants (Metropolitan region).

[149] say a $3 per fare levy for 20 years, depending on the number of journeys (Metropolitan region).

[150] On current market prices of $265,000 and 3247 taxi-cabs.

Table 10.1 Cost and benefits of compensation

	Summary	Net benefits		
		Payback period		
		15	20	25
Discount rate	4%	-$58,580,439	$119,899,454	$266,232,531
	6%	-$159,993,226	-$33,227,302	$61,499,570
	8%	-$243,132,726	-$152,355,675	-$90,574,339

Based on varying periods and discount rates, we see the discounted value of the benefit from the appropriation of consumer surplus exceeds the costs of compensation in three cases. The length of the period in which benefit is received varies according to the discount rate applied. The "breakeven" point where benefit equals costs varies from 16.5 years for 4 per cent to 40.1 years for 8 per cent, while at higher rates the benefits never exceed the costs. A reasonable estimate for a social discount rate could come from the real rate of return on a riskless asset – a 10-year government bond is often used as a proxy. A nominal rate of 5.30 per cent (18 April 1999) implies a real rate close to 4 per cent.

10.5.3 Country taxi services

An issue that may particularly be of concern to the rural sector is the possibility that the removal of public interest restrictions on numbers of licences will reduce service to smaller country towns.

In principle we are doubtful that significant problems will be experienced. Overseas experience (particularly from the United States) suggests that open entry works 'better' in smaller towns and cities where operators become known and develop a reputation for quality of service. This is particularly relevant in country areas where the majority of taxi-cab trips are pre-booked. The need for repeat business reduces problems associated with poor quality service and 'fare gouging'. New taxi and hire-car services will have to demonstrate superior quality or lower prices to consumers to attract custom.

Another potential problem that has been raised is the withdrawal of taxi services altogether from country towns. For example, rather than provide 24-hour service, a country taxi operator might change to a hire car licence and provide service during daytime hours (or charge higher prices at night). The issue here is that there may be social objectives (such as availability at *a fixed price)* that are sought to be addressed by the issue of exclusive licences.[151] We would question the appropriateness of a licence system that forced operators to bear community service obligations which were financed through cross-subsidisation from

[151] The problem here is not strictly about availability, but availability at a price comparable to what day-time consumers might pay. This price, of course, ignores the higher costs of servicing these passengers.

more profitable services.[152] Hence while the introduction of open entry may make these arrangements less tenable, it will at least expose the true cost of these obligations which are currently 'hidden' in the form of higher taxi prices. If there are social objectives to be achieved here, then it is appropriate that these be funded by the Government on a transparent basis.

[152] Of course, making day-time consumers pay more to finance less profitable night-time consumers is not necessarily equitable.

11 Other issues

11.1 Quality and remuneration of drivers

We noted in the report that the status of drivers as bailees or lessees does not appear to be entirely satisfactory. Indeed one submission stated that:

> "Furthermore, the position of taxi-cab-drivers in relation to "WorkCover" compensation and Occupational Health and Safety Legislation is contradictory, confusing and inequitable."[153]

A recent Federal Court case found that drivers are legally not considered to be employees of taxi-cab operators and not therefore responsible for obligations that ordinary employers must bear.[154] It is questionable whether this satisfies the intent of industrial worker legislation.

Drivers are not well remunerated for their efforts in comparison with other occupations. This is likely to discourage 'higher quality' drivers. This is not a good outcome, particularly from the point of view of the tourist industry. In principle, there are three ways in which this might be changed;

- by introducing minimum wage conditions consistent with those in similar occupations;
- by decreasing the supply of available drivers, say through a stricter driver test. Vehicle operators will then have to bid driver wages (or percentage of the meter) up to ensure adequate numbers of drivers are available; and
- by increasing the amount of work available for drivers (thus inducing an increase in the demand for drivers).

It is not clear whether a competitive or regulatory response is more desirable.

The Transport Worker's Union submission contended that the minimum hourly rate of $11.31 as identified in the Transport and Storage Industry Sector Minimum Wage Order (Victoria 1997) should apply to taxi-cab-drivers. It seems difficult to justify the different approach taken to minimum wage determination in the market for taxi-cab drivers compared to other commercial passenger vehicle drivers. The incentive-based remuneration scheme seems common in taxi-cab markets, however. This may be due to problems of driver monitoring (that is, it may be difficult to prevent 'shirking' by drivers). An incentive-based remuneration scheme could still operate in conjunction with a minimum award.

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[153] Submission of Mr Maartin Rothengatter, Geelong and Districts Taxi and Hire-Car Drivers' Association, p. 2.

[154] See Commissioner of Taxation of the Commonwealth of Australia v De Luxe Red & Yellow Cabs Co-Operative (Trading) Society Ltd & Ors [1998] 361 FCA (15 April 1998).

Increasing the driver entry requirements may have a positive impact on both driver remuneration and on customer (particularly tourist) perceptions. The "London model" could be the benchmark here. High quality taxi-cab services charging relatively high prices co-exist with a vigorous, lower price, hire car sector. There is a danger that entry standards sufficient to lift driver remuneration may raise costs more than consumers' value the increase in quality of service.

We have noted that an open entry licensing system is likely to increase the demand for driver labour, possibly resulting in higher wages. Under a more competitive entry system there is likely to be disparity between higher and lower quality drivers. Drivers who can locate passengers and deliver high quality service will likely be considerably better off, as indeed is the case now.

11.2 Disabled passengers and the Multi Purpose Taxi Program

The Multi-Purpose Taxi Program, as earlier indicated, provides an important means by which the Government contributes to accessible transport in the State, particularly for those who have few other transport options. It provides for 50 per cent subsidy on journeys, and, where a wheelchair passenger is transported a further $6 payment for vehicle operators is provided (not all wheelchair passengers travel in M50 wheelchair accessible taxi-cabs). M50 licences have generally been issued free of charge (50 were issued in 1991) and are non-transferable.[155] Licence conditions are similar to conventional taxi-cabs, except that they must give priority to the carriage of passengers with disabilities at all times.

Currently consumers can only obtain assistance with the payment of fares under the Multi-Purpose Taxi Program if they use taxi-cabs. It is evident that limiting the subsidies to these vehicles prevents consumers from choosing hire cars for service, and perhaps delivering some further competition to taxi-cabs in the servicing of this market segment. In light of a number of submissions and consultations that suggested that the service to many disabled patrons was rather poor (although improved since the introduction of the Central Booking Service), we find it difficult to justify limiting this subsidy to taxi-cabs. Hire car operators can provide similar services, and could provide wheelchair accessibility if a sustainable market could be found.

One potential barrier to the extension of the subsidy to allow use of hire cars is the discount claimable from hire cars. Hire cars may artificially inflate prices if they know a person has a discount payable. Taxi-cabs have metered fares that are not so susceptible to 'rorting'.

11.3 Melbourne Combined Maxi Taxis and the Central Booking Service

In February 1999, the Minister for Roads and Ports announced the establishment of a new depot to manage the recently announced 100 high occupancy (wheelchair accessible)

[155] Victorian Taxi Directorate communication.

vehicles. This depot is to be known as Melbourne Combined Maxi Taxis. It is to be managed by the operators of the Central Booking Service (CBS), which provides a single contact point for all of the current fleet of wheelchair accessible taxi-cabs. The Central Booking Service is a private organisation that operates under a contract from the Department to manage M50 vehicles.

Some concern was expressed during the course of the review about the creation of a monopoly booking service for these licences. Our understanding is that the new high occupancy vehicles will be required by licence conditions to belong to the new depot. Hence there is no contract between the Department and the Maxi Taxi Depot unlike the relationship with the CBS. This could be considered to be a legislative restriction on competition which should have been subject to competition and public benefit assessment. The licences have been issued on the basis of this limitation.

We have not had access to the full details regarding the establishment of the new depot. If there is a case to allow only one depot to control these licences we would expect an open, competitive process to determine that depot. We would also expect that there should be clearly specified performance criteria for the service, particularly in respect of its availability to disabled people.

12 Conclusions and recommendations

Our survey and analysis of restrictions on competition in the Victorian SCPV industry has identified several points of weakness with the existing regulatory structure. There are numerous restrictions on competition that appear to lack a basis in public benefit terms, although it can be noted that certain existing regulations require further regulation as a 'second best' position. Our conclusions are that:

- The existing legislation creates distortions between various segments of the SCPV industry. It has resulted in benefits to a few operators (essentially, taxi-cab and hire car licence holders who bought their licences at less that their capitalised present value) to the detriment of consumers, who pay higher prices and wait longer for taxi-cabs than necessary.

- The costs associated with 'public interest' restrictions on entry of SCPVs, the existence of taxi-cab zones (including the Outer-suburban zone), the different vehicle requirements on hire cars and taxi-cabs, and licence conditions which limit SCPVs to specific functions, outweigh the associated benefits.

- 'Public interest' restrictions on the number of taxi-cab and other SCPV licences, when combined with the existing level of fares, has caused considerable costs for consumers; $72 million per year in greater Melbourne for taxi-cabs alone by our estimate. There was little evidence presented that there was a comparable public benefit from entry restrictions, only that the licence holders have obtained the capitalised value of above competitive pricing (estimated at $66 million per year). There are likely to be dynamic and as well as static efficiency costs arising from these restrictions;

- Licence values are very high and have grown rapidly; by over $100,000 in the past four years. However, licence values are just a symptom of the problem. Licence values simply reflect an excess of revenue over cost. Reducing the licence value by increasing costs would not be sensible. For example, moves to further regulate ownership of licences (e.g. preventing assignment) will increase costs without an offsetting benefit. Alternatively, if licence values fall as a result of improvements in driver remuneration this may be seen as promoting a public benefit. Given an appropriate level of driver remuneration, it would be preferable for licence values to fall as a result of lower prices and revenues brought about by allowing greater competition;

- Zoning restrictions on taxi-cabs were introduced to ensure service to all consumers, regardless of their location (and cost of serving them). It is not clear that they would have any effect if entry was open to hire cars or other taxi-cabs. They should be removed, including the Outer-suburban zone.

- Some restrictions identified were more likely to provide net public benefits. This includes fare regulation (if fares are efficiently regulated), vehicle safety, occupational regulation, and other quality controls.

- Fare regulation is problematic as it currently operates. The information requirements to accurately regulate prices are demanding. The Taxi Directorate clearly does not have this information. Moreover, given the on-going industry regulatory role of the Directorate, it may be difficult for it to put pressure on prices which would have the effect of reducing licence values.[156]

- Route restrictions on taxi-cabs cannot be justified, except where there are existing franchise agreements with Government. There is no reason why taxi-cabs should be prevented from competing for public transport contracts to provide route services;

- Quality controls on the industry are generally justified. Due to information asymmetries, quality standards of some form should continue to be the foundation of taxi-cab and SCPV regulation.

- The issue of whether taxi-cabs should be required to belong to depots is difficult. The VTA suggested that service quality and investment would fall in the booking market without this restriction. In addition, it was suggested that where this requirement has been dropped there have been problems of long queues for drivers at busy ranks. However, these arguments are not convincing. At busy ranks, such as the airport, rank spaces can be rationed. If the elimination of the 'first in, first out' rule was successful at ranks, we would also expect consumers to gravitate towards the larger, more established taxi-cab companies. In any event, we suggest that the current requirements of depots are too restrictive (e.g. business plans, 24-hour service) and should be amended.

- International experience with regulation of taxi-cabs suggests that there have been undesirable effects from both regulation and deregulation. The experience with deregulation in the U.S. has often been presented as negative, although the independent commentators are more positive about it. The experience of New Zealand has been positive. The scope and method of deregulation has been an important indicator of 'success'.

- Several models of less restrictive regulation were examined. Each takes elements of the various entry, price, quality and inter-modal controls identified while maintaining an integrated approach across the industry. The potential gains from reform identified are large, by our estimate over $6 million per year for the Metropolitan region in net community benefit from a static perspective only.

- There are likely to be significant transitional issues associated with reforms, with licence holders having large investments to protect, and difficulties in determining an appropriate means of compensation for capital losses.

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[156] Basically because pushing prices down will, in the short term, probably cause taxi-cab operators who take licences under assignment to lose money. This is the mechanism by which licence values will fall, although these transitional costs could be high.

- The transitional problems, should, however be clearly distinguished from the restrictions highlighted by the Review that impose greater costs on the community than the benefits they provide;

- There may be some short term service issues when common carrier obligations are removed. For example, some service providers may be reluctant to provide services to some customers in some areas. However, if fares are regulated to an efficient level, the airport is managed appropriately and hire cars are able to freely enter, then there is no reason to assume these problems will persist. If certain customers face higher prices for services, then wider use of subsidies for users may be considered appropriate.

12.1 Preferred model

Our preferred model, which satisfies the test of a less restrictive alternative that achieves the objectives of the Act in the most efficient way, is a combination of options 3 and 4.

Our review of alternatives in section 10.3 suggested that there are considerable benefits to be gained from the removal of the public interest criterion for the issuing of licences for SCPVs, with quality controls (for public safety and consumer protection) remaining the integral component of regulation. Our preferred model is to buy back all existing licences and introduce an open entry scheme with minimum quality standards. Annual licence fees would be levied to fund the buyback of licences.

We consider that fare regulation in the cruising market should be modified by requiring depots individually to post prices. Posted prices would be subject to a reasonableness test prior to approval by an economic regulator. In combination with more efficient fares (whether as a result of regulation or competition), the industry will far better achieve the Government's policy objectives. Meters will continue to be mandatory in cruising taxi-cabs. Taxi-cabs operating in the pre-booked market could charge a variable booking fee (not subject to price oversight) to ensure they are not disadvantaged by the meter requirement.

We are cognisant of the transitional problems associated with a move to such a system. Taxi-cab operators and consumers may take some time to adjust to a competitive marketplace, although evidence suggests that this adjustment will occur. A charter of customers' rights, explaining the rights and obligations of customers and drivers (e.g. the right to choose any taxi-cab off a rank, the right of a driver to refuse a passenger in certain circumstances), which is widely publicised and enforced by the Directorate may assist in this regard. In addition, the provision of detailed information to prospective operators (including legislative and other requirements, financial obligations, etc.) should also assist.

We consider, consistent with the National Competition Policy principles, the best approach would be for an independent expert economic regulator to regulate fares. The Office of the Regulator-General has the required economic skills and pricing experience to undertake this task and is independent of the industry. We recommend the Office should undertake an

early review into fare setting methodology and establish an appropriate information base to make a proper assessment of the level and structure of fares.

In the longer term, we favour deregulation of fares. The New Zealand experience shows that with appropriate safeguards against price gouging, fare competition between taxi-cabs is possible. The ultimate goal is to ensure that it is consumers, rather than regulation that chooses who operates in the industry and what services are provided. Under this system, quality services will be rewarded with increased patronage.

Overseas experience with open entry has sometimes resulted in a large number of independent operators converging on already well-serviced areas. The restriction requiring operators to belong to a depot may help to avoid excessive entry by, in effect, adding a barrier to entry in the form of higher cost. It would also reduce the dependence of operators on cruising and rank work. Depot or network connection may assist in relation to ensuring driver and passenger safety and depots may play a useful role in promoting self-regulation in the public interest. On the other hand, depots can facilitate restrictions on competition, especially where their numbers are limited and membership tightly controlled. We consider that depot requirements be minimal so that it is not difficult for a relatively small number of operators (say 20) to establish a depot. Extensive business plans should not have to be required to be provided to the licensing body before depots are approved. If this is adopted we would support continuation of the requirement for operators to belong to a depot. Once consumers get used to choosing taxi-cabs rather than accepting the first in line, then this requirement could be dropped.

Higher costs of enforcement will be an aspect of our preferred model. Particularly in the early period of open entry, the enforcement of standards will be more difficult as a consequence of the higher number of taxi-cabs and hire cars. These costs should be seen as part of an investment required to achieve the considerable net benefits of reform. Increased competition should also not be ignored as an enforcer of minimum standards. Particularly in the pre-booked market, reputations are an important aspect of consumer choice.

12.2 Summary of recommendations

A summary of the changes necessary to enact our preferred model is shown in Table 12.1.

Table 12.1 Recommendations

Outcomes	Cruising market (hailed and rank)	Pre-booked market
Type of vehicle	Taxi-cabs only	Taxi-cabs, hire cars and other SCPVs
Entry (public interest) restrictions	Remove – buyback of licences Zoning restrictions removed	Remove – buyback of licences Zoning restrictions removed
Fare regulation	Move fare regulation powers to ORG. ORG to assess reasonableness of depot posted prices. In long term, remove fare regulation when achieve effective competition at ranks.	No restriction to apply.
Quality regulation	Vehicle standards should be related to safety objectives; no change to livery or other standards: ■ regular inspections; and ■ vehicle age limits (unless establish vehicle safety). Taxi-cabs must have meter. Eliminate 'excessive' authorisation requirements for depots. Maintain requirement for operators to belong to a depot in short term, remove in long term. Removal of minimum depot requirements in relation to business plans, 24-hour service.	Vehicle standards same as taxi-cabs (remove luxury requirement): ■ regular inspections; and ■ vehicle age limits (unless establish vehicle safety).
Inter-modal restrictions	Prohibition on route services removed where public transport service not operating or where under contract.	Prohibition on route services removed where public transport service not operating or where under contract. Hire cars should be eligible for Multi-Purpose Taxi Program subsidies, if pricing problems can be overcome.
Licence conditions	Standard set of licence conditions, including: ■ hire on demand	Standard set of licence conditions, including: ■ no plying for hire ■ no standing at ranks
Driver regulation	Introduce driver 'demerit' point system for breaches of certificate conditions, regulations	Introduce driver 'demerit' point system for breaches of certificate conditions, regulations

The characteristics of the two basic types of vehicles can be summarised as follows:

Table 12.2 Comparison of taxi-cabs and other SCPVs

Characteristic	Taxi-cab	"Hire Car" (includes all non-taxi-cab SCPVs)
Cruising market	Yes	No
Pre-booked market	Yes	Yes
Attached to depot	Yes	No
Fare control	Yes - fares lodged in the cruising market - variable booking fee in booking market	No
Meter	Yes	No
Attached to zone	No	No
Vehicle standards	Existing vehicle standards	Other vehicle standards (e.g. consistent with Australian Design Rules)
Driver tests	Yes	Yes
Driver I.D	Yes	Yes
Regulated appearance	Yes (colour, livery, distinctive plates)	Yes (hire car markings, no colour, distinctive plates)
Age limits	Vehicle age requirements (can extend)	Vehicle age requirements (can extend)
Spot vehicle checks	Yes	Yes
Annual licence fee	Yes	Yes

Appendix A – Submissions

Submission number	Date received	Title	First name	Last name	Organisation	Industry relationship
1	15/01/1999	Mr	Frank	Hart	Martin Meter	Taxi-cab equipment manufacturer
2	5/02/1999	Mr	Frank	Hart	Martin Meter	Taxi-cab equipment manufacturer
3	9/02/1999	Mr	Ron	Michell	Consultant	Consultant to the industry
4	17/02/1999	Dr	Mark	Schier	Swinburne University of Technology	None
5	22/02/1999	Mr	Leigh	Tait		None
6	22/02/1999	Mr	Steven	Tintas	General Manager, North and Silver Taxis	Fleet manager
7	23/02/1999	Mr	Kelran	Jones	Chairman of Directors, Dandenong Taxis	Depot
8	23/02/1999	Mr	Robert	McAllan		Owner of SV licence
9	24/02/1999	Mr & Mrs	Gary & Jennifer	Tredwin	Sale Taxi-cab Service	Taxi-cab company and licence owners
10	25/02/1999	Mr	Phil	Franet	Silver Top Taxi Service Ltd	Depot
11	25/02/1999	Mr & Mrs	Noel & Lesley	Scanlon	Morwell Taxi Service	Taxi licence owner (country)
12	25/02/1999	Mr & Mrs	Oscar & Desma	Harrington	Morwell Taxi Service	Taxi licence owner (country)
13	25/02/1999	Mr & Mrs	John & Elizabeth	Jongerius	Morwell Taxi Service	Taxi licence owner (country)
14	26/02/1999	Mr	Ian	Forsyth	North Suburban Taxis	Depot
15	26/02/1999	Mr	J	Dineen	Pakenham Taxi Service	Taxi operator
16	26/02/1999	Mr	Clive	McKenzie		Licence owner (country)
17	26/02/1999	Mr	Neil	Sach	Chief Executive Officer, VTA	Industry association
18	26/02/1999	Mr	David	Tuckwell	Secretary, Black Cabs Combined Limited	Depot
19	26/02/1999	Mr	Graeme	Cameron	National Secretary, Taxi Industry Council of Australia	Taxi driver's association
20	26/02/1999	Mr	John	Prideaux		Driver
21	26/02/1999	Mr	George	Konstanopoulos	Embassy taxi-cabs	Depot
22	26/02/1999	Mr	Gary	Treloar	Ballarat Taxis Co-operative Ltd	Depot (country)
23	26/02/1999	Mr	E.G.	Beard		Owner / Driver
24	26/02/1999	Mr	Geoffrey	Watson		Taxi proprietor and Assignment

						Manager
25	26/02/1999	Mr	Maarten	Rothengatter	President, Geelong and Districts Taxi and Hire Car Drivers' Association	President of drivers' association
26	26/02/1999	Mr	Charles J	Boschetti	Director, Shepparton White Top Taxis Ltd	Taxi operator
27	26/02/1999	Mr	Peter	Trost		Licence holder
28	1/03/1999	Mr	Tom	Groves	S.E. Taxis Pty Ltd	Depot operator / licence owner
29	1/03/1999	Mr	Phillip L	Drinnan	Managing Director, Alternative Chauffeured Transport Pty Ltd	Limousine Service Operator
30	1/03/1999	Mr	W. D.	Murray	Latrobe Valley Taxi Co. Pty Ltd	Taxi company
31	1/03/1999	Mr	Anthony	Di Benedetto		Licence owner
32	1/03/1999	Mr	Doug	Thomas	SANTED Group	
33	1/03/1999	Mr	Michael	Bukhshtaber		M50 licence owner
34	1/03/1999	Mr	Bill	Noonan	Branch Secretary, Transport Workers Union	Union
35	1/03/1999	Mr	Douglas	Grey	Castlemaine Taxis	Taxi operator
36	1/03/1999	Mr	Anthony	Bullard	Victorian Taxi Owners Group	Industry group
37	5/03/1999	Mr	John	D'Orival	Private Health Transport Operators Association of Australasia Inc.	Non-emergency patient industry organisation
38	9/03/1999	Ms	Catriona	Lowe	Legal Policy Officer, Consumer Law Centre Vic. Ltd	Consumer body
39	9/03/1999	Mr	A.G	Lockwood-Penney		
40	11/03/1999	Mr	Marcel	Bugeja		Taxi owner
41	11/03/1999	Mr	Peter	Manikas		Taxi owner
42	10/03/1999	Mr	John	Karmouche	HD Chauffeur Ride	Restricted hire licence owner (motorcycle)
43	17/03/1999	Mr	Ken	Ogden	RACV	Motorist group
44	17/03/1999	Mr	Lawrie	Groom	on behalf of the Victorian Hire Car Association	Industry Association
45	14/02/1999	Mr	Kevin L	Norris	Bus Association Victoria	Industry association

46	18/03/1999	Mr	Lawrie	Groom	on behalf of the SPV sector	Industry association
47	25/03/1999	Mr	Zyg	Zielinski	Bannockburn & Winchelsea District Taxi Service	Taxi operator
48	7/04/1999	Mr	Phil	Rowan	Personalised Chauffeur Drive	Limousine service
49	8/05/99	Mr	Vincent	Maltese	Pro-Cab Taxi Management	Taxi operator

Appendix B – Summary of the *Transport (Taxi-cab) Regulations 1994*

Regulation number	Regulation title	Regulation
5.	Taxi-cabs licences	■ when they are required to be returned and when duplicates can be issued
6.	Drivers Certificates:	■ these are conditional on holding a full drivers licence and on displaying a colour photograph of the holder in the taxi-cab being driven; ■ may be subject to any test and qualification specified by the Department head relating to fitness to drive a taxi-cab; ■ requires a legally qualified medical practitioner to certify that the driver is not suffering from any condition which would prevent driving a taxi-cab and certification of having passed a specified acuteness of vision test; and ■ can be granted for up to 3 years.
7.	Licence holders not to allow uncertificated driving.	
8.	The books and records a licence holder must keep about the taxi-cab operations.	
9.	Signs, symbols, notices, labels and fittings required to be attached to a taxi-cab	
10.	Taxi-cab specifications	■ covering design and construction
11.	Alterations to the construction of equipment of a taxi-cab require approval.	
12.	Emergency warning devices	■ must be fitted with a readily accessible activating switch
13.	Protective screens	■ may be fitted in an approved manner
13A.	Boot lock release devices	■ must be fitted
13B.	Driver duress alarms	■ must be fitted
13C.	Exemptions from Regulation 13A or 13B.	
14.	Livery	■ depot name etc. to be displayed in an approved manner and vehicle colour to be approved
15.	Sign on taxi-cab roof	■ must be fitted as approved and the lamp used as specified
16.	Tariff lamps	■ must be operated in the specified manner
17.	Not for hire signs	■ to be used as specified

18.	Air conditioner	■ is required unless an exemption is approved
19.	Inspection of taxi-cabs	■ can be required and rectification of defects ordered
20.	Interference with equipment in or on taxi-cab	■ not permitted unless driver consents
21.	Maximum number of passengers	■ as specified in licence conditions
22.	Passenger routes	■ most direct practicable route to be taken if hirer does not nominate the route
23.	Touting not permitted	■ other than by displaying an approved sign or notice
24.	Driver to remain with taxi-cab	■ except in specified circumstances or with reasonable cause
25.	Driver's appearance	■ a uniform is to be worn by drivers on duty and appearance must be neat and clean
26.	Driver not to consume alcohol	■ from start to end of shift
27.	Smoking prohibited in taxi-cabs	
28.	Animals	■ not allowed in passenger areas except for guide dog
29.	Picking up and setting down passengers	■ must be as close as possible to the side of the highway and must not intervene with orderly distribution of other vehicles
30.	Passenger behaviour	■ can refuse to carry violent, noisy, misbehaving, filthy or offensive people unless they are going to a hospital, police station or watchhouse.
31.	Passenger assistance	■ reasonable help to passengers to be given and reasonable care of luggage
32.	Property found in taxi-cabs	■ must be given to the driver and promptly delivered to the police
33.	Taxi-cab-stands	■ required to be used only for designated purpose
		■ must be used in order of arrival
		■ the first in line is entitled to be hired first, but a passenger can choose any taxi-cab and the driver must accept the hiring
34.	Hiring charges, detention rates, multiple hirings and receipts	■ charges limited to the amounts allowed in licence conditions
		■ fee can be agreed for delayed payment
		■ drivers not to refuse request to wait return of passenger except in specified circumstances
		■ hired cabs not allowed to be hired by others unless hirer consents and destinations are in the same general direction
		■ basis of fare must be explained to hirer if asked at completion of journey
		■ receipt with specified details to be given if requested
		■ passenger can be requested before journey starts to demonstrate ability to pay fare and a deposit may be required
35.	Taximeters	■ tested and sealed meters are required to be fitted and operational
		■ fittings not to be changed to alter the working order of the taximeter or tariff indicator lamps
		■ taximeter only to be used when taxi-cab is hired

■ hirer to be advised of tariff changeover ■ taximeters can be required to be inspected and tested

Appendix C – Calculation of effect of supply restriction

The basic model

The basic model we have constructed follows the precedent of Swan (1979) and Gaunt and Black (1996). The analysis makes certain assumptions about taxi-cab markets; in particular, it assumes that:

- waiting times are constant;
- prices are able to readily equilibrate to a certain competitive price, or can be regulated to achieve an efficient price; and
- there are no externalities.

We have no *a priori* reason to assume that these assumptions will significantly affect the analysis. From our perspective, changing these assumptions is just as likely to under- or over-estimate the costs of regulation; for example the current calculation does not include any dynamic efficiency gains which may accrue under free entry, or the costs of congestion / pollution externalities. Some of these effects will be positive (e.g. dynamic gains, waiting times should improve, fares will fall) and some will be negative (pollution, congestion, higher enforcement costs). We cannot be sure which way the balance will fall.

Table C1 - Model inputs

Input	Source	Denoted by	Base value
Current quantity of trips	VTA submission	Q_c	22,400,000
Licence value (less goodwill assumed to relate to depots)	Victorian Taxi Directorate, KPMG estimate, Industry Commission (1994)		$265,000 – 10% = $238,500
Rate of return	Victorian Taxi Directorate	r	9%
Average kilometres per taxi-cab	VTA	V_{km}	125,400
Vehicle utilisation	VTA	V_{ut}	58%
Elasticity of Demand	Various sources, including: ■ Beesley (1992) ■ Frankena (1983) ■ VTA Submission	ε_D	-0.8
Current price	VTA	P_c	$12.98

Derivation of effects of supply restriction

The starting point with the examination of the effects of the restriction is the licence value. The net licence value (incorporating a 10 per cent goodwill component), currently around $238,000 for Metropolitan licences, returns an approximate 9 per cent return per year through assignment. This gives a figure of $21,465 ($A_r$) return for the first year. In a year, the average taxi-cab drives approximately 125,000km (V_{km}) – not distinguishing between fleet and owner-driver cars – but given a vehicle utilisation rate of 58 per cent (V_{ut}) the actual (paid) kilometres in which this money must be recovered is shorter (72,500km).

Hence the amount that must be recovered per car per year is:

$$\frac{A_r}{V_{km} \times V_{ut}} = A_c \text{ cents per paid kilometre}$$

Based on the VTA average fare data (10km for an average trip), this equates to:

$$\frac{10km}{\$12.98} = 129.8\,¢/\text{paid km}$$

Effect of licence value on price

If net licence values were zero, A_c would fall to zero and the competitive price would then equal:

129.8 ¢/km – (current) A_c ¢/km = competitive price

In order to calculate the welfare effects we need to look at the supply and demand curves for taxi-cab trips. The effect of changes in price on the quantity of trips demanded can be determined using the equation for elasticity of demand. This equation highlights the relative changes in price and quantity – ordinarily it is used to show the effect of a (say) 1 per cent change in price on the percentage change in quantity demanded. This formula is:

$$\varepsilon_D = \frac{\frac{\Delta Q}{Q}}{\frac{\Delta P}{P}}$$

where ΔQ is the change in quantity demanded, Q is the original quantity, ΔP is the change in price from the current to a competitive (rent free) situation, and P is the original price. Because we do not know ΔQ, we have to make an estimate of ε_D and then solve for ΔQ, which will give us a competitive quantity.

There are no satisfactory measures of the elasticity of demand for taxi-cab services in Victorian markets. Estimates of elasticity of demand in overseas markets and covering earlier years cannot be assumed to apply to local markets now. However, it is typical to adopt the assumption of inelastic demand in the taxi-cab literature and for our purposes we adopt –0.8 as our base figure. This figure is an average of the overseas studies we are aware of. Sensitivity analysis has been performed on all the data as presented below.

Given from before:

ΔP \$12.98 - \$10.02

P \$12.98

Q_c 22,400,000

ε_D -0.8 (by assumption)

ΔQ can therefore be calculated as 4,075,671 trips giving a competitive quantity of 26,475,671 trips.

The elasticity of supply is more troublesome that demand. Regulation distorts the supply curve such that supply is reasonably elastic at low prices (because there is sufficient capacity to meet changes in price) but very inelastic at higher prices (because the industry already appears to be close to capacity utilisation). We therefore do not attempt to estimate the welfare effects of a loss of producer surplus from the lower number of trips – however note that this would increase the measured welfare loss if taken into account.

We can determine the losses caused by the restriction on licences and the associated licence values. The "deadweight" efficiency loss is determined to be \$6,014,105, which is the area of the triangle $\frac{1}{2}\Delta P \times \Delta Q$, while the per annum transfer to licence owners is estimated to be \$66,107,376 (Q_0 times ΔP). The total of these two figures is the loss of consumer surplus per year.

Total consumer surplus can be calculated from calculating the slope of the demand curve as given by:

$$\frac{\Delta P}{\Delta Q} = \frac{1}{\varepsilon_D \times \frac{Q}{P}}$$

and, assuming demand is linear in Q, we can estimate:

$$P = \alpha_1 + \beta_1 Q$$

where α_1 is the intercept and β_1 is the slope of the demand curve given above.

Sensitivity of results

Table C.2 shows the results of the partial equilibrium model under two different 'cases'. A 'high' and 'low' set of assumptions was chosen on the basis of minor variations (usually around 5-10 per cent) on the base case. The analysis is most sensitive to changes in net licence values and rates of return, while the elasticity of demand significantly affects deadweight losses.

Table C.2 - Sensitivity to assumptions

	Base case	High	Low
Net licence value	$238,500	$250,000	$200,000
Rate of return	9%	10%	8%
Elasticity of Demand	-0.8	-1	-0.6
Current quantity	22,400,000	25,000,000	20,000,000
Current Price	$12.98	$12.98	$12.98
Competitive Price	$10.02	$9.54	$10.78
Competitive quantity of trips	26,475,671	31,622,320	22,034,377
Estimate of efficiency loss	-$6,014,105	-$11,381,283	-$2,237,651
Estimate of transfer	-$66,107,376	-$85,931,229	-$43,996,789
Change in consumer surplus	-$72,121,480	-$97,312,512	-$46,234,441

This table suggests that the results are quite sensitive to changes in the main variables, although even in the 'low' case, the potential efficiency losses are substantial. The transfer of income is also significant in this case. As to the likelihood of the low or high case, we have no reason for preferring either specification over the base case.

Appendix D – References

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