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DRAFT REPORT
TAXI FARE REVIEW 2007-08

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PREFACE

On 19 September 2007, the Minister for Public Transport (**Minister**) directed the Essential Services Commission (**Commission**), under section 186(1) of the *Transport Act 1983* and by notice in the Victoria Government Gazette on 14 September 2007, to undertake an independent review of taxi-cab fares in Victoria by 30 June 2008. On 14 January the Acting Minister for Public Transport provided amended terms of reference to the Commission. The notice from the Acting Minister is accessible from the Commission's website (www.esc.vic.gov.au). The terms of reference are also reproduced in Appendix A of this Draft Report.

This Draft Report provides the Commission's preliminary conclusions in relation to the matters it is required to report on under the Taxi Fare Review 2007-08. The Commission invites comments on the preliminary conclusions in this report.

Interested parties and members of the public are invited to submit written comments to the Commission (hard copy and electronic format are preferred) by Tuesday 1 July 2008 to:

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EXECUTIVE SUMMARY

Background and terms of reference

On 19 September 2007, the Minister for Public Transport directed the Essential Services Commission (Commission) to undertake an independent review of taxi-cab fares in Victoria by 30 June 2008. On the 14 January 2008 the Minister provided amended terms of reference to the Commission.

The Commission was asked to report on:

- the impact of further and sustained upward pressure on liquid petroleum gas (LPG) prices on taxi operators in an Interim Report (submitted on 12 March 2008)
- an appropriate price-setting model to provide for automated fare adjustments for the next 3-5 years, including the timing of such adjustments
- the appropriateness of the taxi fare structure within the current market
- appropriateness of selected surcharges, including the New Year's Eve non-metropolitan taxi surcharge, and a surcharge for pre-booked premium service taxis, and whether they should form a permanent part of the taxi fare structure
- the distribution of taxi fare revenue and measures that may be considered by Government to improve taxi driver remuneration, and
- information reporting by the taxi industry and performance measurement.

The Commission released an Issues Paper on which submissions were sought. Three public forums were held (in Melbourne, Bendigo and Morwell) and Commission staff met with a number of stakeholders to obtain further information and perspectives.

The Commission's approach to the review was to first examine the nature of the market for taxi services, including relevant background information on the industry participants and the services provided. The Commission has sought views on and examined the obligations on industry participants under the regulatory framework, the supply and demand for taxi licences, trends in demand for taxi services, trends in customer satisfaction and other aspects of performance of the industry. The Commission also examined the performance of the Victorian taxi industry in meeting the government's transport policy objectives with respect to the availability and affordability of taxi services to consumers.

The Commission's Interim Report (submitted to the Minister for Public Transport on 12 March 2008) addressed the question of the adequacy of fare levels in the light of the cost pressures on the industry including recent increases in the price of LPG. An interim fare increase of 4.2% was announced by the Minister on the 19 March 2008 and implemented in April. In this Draft Report the Commission examined whether any further price adjustment to the level of fares is necessary at the

present time, prior to the next scheduled fare adjustment to be made in September 2008.

The Commission examined a number of approaches to setting price paths for taxis, including alternative fare escalation formulas and the appropriate allowance for productivity. The Commission has identified a preferred approach and quantified the trend rate of productivity improvement.

In accordance with the terms of reference, the Commission has examined fare structures, identified a number of issues and formulated preliminary conclusions for comment. This examination covered fixed and variable charges and the various surcharges employed, including time of day surcharges and the proposed premium taxi service surcharge.

The Commission has identified a number of factors relevant to the distribution of income between the main industry players - drivers, operators, network service providers and licence holders. A range of options for improving driver remuneration have been identified and discussed, on which the Commission is seeking comment.

The Commission has examined the various purposes of information gathering, including performance measuring and target setting, and the range of sources of information available to be used for these purposes. The Commission makes some preliminary conclusions on which measures should be reported and how the information collection could be better co-ordinated and is seeking stakeholder comment on these questions.

Affordability and the availability of services to low income and disabled users is a particular issue addressed by the review. The Commission has examined the subsidies available to disadvantaged users, the availability wheelchair accessible taxi services and community transport, and has identified specific issues on which it seeks further comment.

In addition, the Commission has considered a number of broader considerations relating to the appropriate regulation of the taxi market. These concern the objectives of the regulatory regime and the regulation of aspects such as service standards, safety and entry restrictions. Comment is also sought in relation to these broader considerations.

The Commission's approach to each of the aspects of the Terms of Reference has been to have regard to relevant overall objectives for the taxi industry (discussed further below), including improving the levels of service quality and customer satisfaction, facilitating the availability and affordability of taxi services, accessibility of transport for the elderly and disabled, fair and reasonable remuneration within the industry, and increasing competition and efficiency.

The Victorian taxi industry

Of relevance to the Review, are the conditions of supply and demand in the market for taxi services, and the performance of the industry in meeting customer expectations of service quality and in meeting the transport policy objectives of the Government.

The taxi industry is made up of taxi operators, drivers, network service providers (“depots”), and licence holders. There has been an increasing trend of concentration in network service providers in the metropolitan area over the last decade, with two major depots now accounting for over 90% of the metropolitan taxi market. Taxi operators are required to be affiliated with an approved network service provider.

Taxi drivers are engaged by taxi operators through bailment agreements which typically provided for a 50/50 sharing of fare revenue between the taxi operator and the driver. Drivers currently undertake a 115 hour course prior to being accredited and wheelchair accessible taxi (WAT) drivers are required to complete an additional 40 hour course. Drivers must also enter into an agreement with a network service provider.

The Commission engaged PricewaterhouseCoopers (PwC) to carry out a survey of taxi operators and drivers in December 2007, which provided information for this Review. In the survey, the great majority of drivers indicated that they have had no choice in the terms and conditions offered under bailment agreements. Survey results indicate that on average drivers obtained approximately \$13.20/hour in 2007 before taking into account income from tips. Out of this drivers typically cover additional expenses such as superannuation and sick leave.

At the same time, the scarcity of licences has increased, such that the price of a taxi licence has increased from \$265,000 in 1999 to \$475,000 in 2008. Trends in the supply of taxi licences show that they have become fewer relative to Melbourne’s growing population, and this trend is more pronounced when consideration is given to the increasing demands associated with the aging of the population.

The total number of taxi trips in Victoria over the period 1999 to 2008 is estimated to have increased at an average rate of 2.1% per annum, which is the same as the rate of growth in the number of taxi licences, when restricted peak period licences are included. However, the average trip distance is estimated to have decreased over the same period. This pattern of demand growth for taxi services tends to suggest a declining mode share for taxis, which appears to reflect supply constraints on the availability of taxis.

Customer satisfaction data, which has been surveyed for the last two years by the Department of Infrastructure (DOI), shows a significant decrease in overall customer satisfaction with taxi services from 65% in later 2005 to 58% in late 2007. Taxis have a lower degree of customer satisfaction than any other mode of public transport. This trend is associated with decreased satisfaction with a range of service attributes. Some of the most prominent trends are in the dissatisfaction with taxi availability.

These findings support the view that the constrained supply of taxis is resulting in an inability to meet demand, and stymieing the ability of the taxi industry to compete effectively with other modes of passenger transport. It also results in high licence assignment fees, which is a substantial cost burden on taxi operators. The most significant opportunity for productivity improvement will arise from reducing the impost of licence assignment fees.

Approaches to setting price paths

Current level of fares

To assess the need for a further adjustment to current fares, the Commission used information from the survey of taxi operators and drivers carried out by PricewaterhouseCoopers (PwC) to assess the level of taxi operator costs and revenues. The survey results were benchmarked against data provided by the industry and found to be representative. Analysis of the survey suggests that the total returns to taxi operators and licence holders have increased from 19.0% of fare revenue in 2000 and 19.1% in 2004 to 20.7% of revenue in 2007. It is estimated to have increased to 21.3% in the three months to June 2008.

Most of the increase in combined taxi operator and licence holder margins was associated with increased licence assignment fees from 15.2% of fare revenue in 2000, and 15.5% in 2004 to 16.4% of revenue in 2007.

Taxi operator margins increased from 3.8% of fare revenue in 2000 to 3.6% in 2004 and 4.3% in 2007. However, calculating operator margins on the basis that licence assignment fees are held constant at estimated 2002 levels indicates an increase to 6.7% in 2007 and, based on movements in LPG prices and taxi fares alone, are forecast to be 7.9% for the three months to June 2008. The adjusted operator margin lies above a benchmark of 5% of revenue derived from the NSW taxi market.

The best available information the Commission has at the present time indicates that current fare levels are adequate to facilitate the financial viability of the industry and further 'one off' fare adjustments do not appear to be necessary at the present time. However, some adjustment is expected to be required for unit cost movements in the period from the December quarter 2007 to the June quarter 2008.

The Commission welcomes further information and comment on these questions.

Price path formulas

The Commission considered three alternative approaches to price escalation formulas for the next regulatory period:

- An industry based cost index, which involves an annual assessment of the movements in input prices for different cost components. IPART adopts this approach and uses survey based information, as well as published indices and industry-sourced information for certain costs.
- Broad economic indices, such as CPI, the Transportation or Private Motoring components of the CPI, or the Wage Price Index (WPI). Victoria used the CPI-X formula in the last fare-setting review.
- Composite indices, which combine a number of readily available published indices relevant to taxi input prices.

The selection of a preferred approach is in part a trade-off between simplicity, the power of incentives for efficiency and cost reflectivity.

Whilst an industry-based cost index is favoured by some Australian jurisdictions because it encompasses costs specific to the taxi industry, this approach is

relatively costly and time consuming. Another shortcoming of an industry-based cost index is the relatively weak incentives for the industry to pursue cost efficiency, as costs are effectively passed-through directly into prices.

In contrast, a broader economic cost index or the composite cost index approach are simpler to implement, and less costly as they utilise widely published ABS economic cost indices for changes to fares within a pricing period. They also have the potential to provide stronger efficiency incentives.

However the CPI-X index is considered to be insufficiently cost reflective, and potentially imposes too tight a constraint on driver incomes. Submissions from the VTA and two taxi drivers indicated dissatisfaction with the current CPI-X approach, as they did not believe it to be sufficiently cost-reflective.

The alternative is to use a specifically constructed index of input prices which uses a small number of published price indices which are relevant to Victorian taxi industry costs, and weights these by the shares of the respective inputs in industry costs to derive a “composite index of input prices”. The composite index approach has a number of advantages. It is relatively simple to implement, as it primarily utilises indices published by the Australian Bureau of Statistics (ABS), and LPG price indices. The approach would generate a price path that adequately tracks costs, which is consistent with ensuring that price levels remain adequate for the industry over the pricing period but are not excessive. The composite cost index approach would also provide strong efficiency incentives (as it relies on external indices, and is uninfluenced by industry cost outcomes).

Price indices that are expected to be relevant for constructing the composite input price index include: the ABS Wage Price Index (WPI) for the Transport sector (for driver costs); the Private Motoring Index (PMI) in the CPI, Melbourne (for a number of vehicle-related and on-road costs); LPG price indices published by FuelTrac; the Insurance Index in the CPI, Melbourne; and the CPI – All Groups, Melbourne (particularly for overhead costs).

The Commission does not propose to include licence assignment costs in the construction of this index, due to its nature as an economic rent, and to avoid the circularity that the inclusion of these fees would introduce into the index. However a base level assignment fee is included (but not indexed) to ensure that the other cost items are not overrepresented.

The composite input price index would normally need to be adjusted for forecast productivity improvements to derive a unit cost path relevant for price setting. This is because in an effectively competitive market prices will track industry unit costs. After undertaking a preliminary analysis of recent trends in productivity, the Commission concluded that a productivity X-factor of 0.5% would be appropriate.

A preliminary assessment of the fare increase required to recover the additional costs borne by taxi operators for security screens (being 50% of the overall costs) has been assessed to require an increase of approximately 0.1%.

Fare structure issues

The main features of the current tariff structure are as follows:

- The most important components of the fare schedule are the fixed charges and variable charges. There are two fixed charges: the flag-fall charge, which applies

- to all taxi trips when the meter is started; and the booking fee, which is only incurred if the cab is pre-booked. There are also two variable charges. When the cab is moving at less than 20 or 21 kilometres per hour (depending on the zone) a time-based charge applies. When the cab is travelling above this speed threshold, a per-kilometre distance charge applies.
- Surcharges which are applied during certain periods or days. These include the late night surcharge (or 'extra'), which applies from midnight to 5am in the metropolitan zones, and from midnight to 6am in the other zones, and is a percentage premium in the metropolitan zone, and fixed dollar premiums in the other zones. There is also the New Year's Eve surcharge, which applies in the regional and country zones.
 - Multi-hire and shared hire rates. Multi-hire is where there are 6 or more passengers. Higher variable charges apply to multi-hire trips. For shared rides, where the passengers are unknown to one another, each passenger pays 75% of the metered fare at their destination.
 - The fare differentials between country and metropolitan areas. Aside from the differences in the surcharges mentioned, the fares in the regional and country areas feature a higher distance charge, with fixed charges being the same.

Fixed and variable charges

In examining the fixed and variable components the Commission addressed issues concerning the balance between the flag-fall charge and the per-km charge, whether taxi drivers have enough incentive to undertake short trips, and whether the tariffs are sufficiently attractive to users for longer trips. The Commission also examined whether the booking fee is adequate, and recovers all of the relevant costs including taking the cab to the passenger pick-up point, and whether the waiting time charge is at the right level.

The Commission's approach involved using survey information to define a cost function for the typical taxi cab. The Commission also analysed demand characteristics in order to determine the sensitivity of demand to price changes. Combining this with information on the trip-length profiles enabled the Commission to calculate the consumer and producer surplus associated with alternative tariff structure options and a welfare maximising tariff. Consideration was also given, where pertinent, to comparisons with other jurisdictions.

The main results of the analysis were:

- Variations in the charges were found to result in only minor changes to the calculated economic welfare, given the assumptions employed in the model.
- The distance based charge was found to be at approximately the appropriate level.
- The option of a 'two-tier' distance charge was tested, but the optimal distance charges for each tier were found to be similar. Therefore a single distance charge seems to be appropriate, based on the assumptions used.
- An increase in the booking fee is required to ensure that it exceeds the directly attributable cost of booking.
- An increase in the booking fee would require a reduction in some other charges to ensure revenue neutrality. The analysis suggested that the flag-fall charge

should be reduced to 80% of its present level, and the booking fee increased to equal the flag-fall charge.

Multi-hire and shared rates

In regard to shared and multi-hire rates the relevant issues include whether the amount of the fare reduction for shared rides, and the calculation method, are appropriate. Since passengers will normally have the option of taking a non-shared ride at the metered tariff, the Commission's preliminary view is that the multi hirer tariff should be de-regulated. The taxi driver should be able to freely negotiate shared-ride rates. However, if a negotiated rate is used, then the respective rates applying to each passenger should be agreed by them at the commencement of the trip.

For high occupancy vehicles (HOVs), there is the question as to how many users should trigger a multi-user rate, whether the multi-user rate is at the appropriate level and whether HOV multi-user rates are sufficiently competitive with relevant alternative methods of transport. In the Commission's preliminary view, high occupancy taxis should be able to charge the high occupancy tariff whenever they are carrying more passengers than the maximum limit for a conventional cab. This is because when a HOV is carrying more than 4 passengers, the passengers are obtaining a benefit from the operator's additional investment in a HOV vehicle. This change in the fare structure will improve the returns to HOV operators, and encourage investment in HOVs. As HOVs are accessible vehicles, it would also support the use of WATs, and therefore assist the industry to meet the Disability Standards.

Country tariffs

With respect to country tariff issues, the Commission considered whether the differentials between country and metro tariffs are at appropriate levels, and whether the prevailing differences in tariff structure between country and metropolitan areas are appropriate, or whether they should have a similar structure, or whether other structures should apply, such as a higher fixed component as suggested by the Victorian Taxi Association (VTA).

The variable component of the country taxi fare is currently 7.5% higher than the metropolitan variable charge, and in the Regional Zone it is 4.8% higher. The waiting time charge is the same between the zones, and in consequence the threshold speed below which the waiting time charge applies differs between the zones.

The Commission's preliminary view is that it would be simpler for the threshold speeds to be equivalent, and for the waiting time charge to be proportionate to the distance charge. The Commission also believes that the booking fee should increase to be equal to the flagfall charge, with the latter to be 80% of its current level. By implication the fixed charges associated with a pre-booked service would be higher than their combined current level. This change in the tariff structure will significantly increase the fixed charges for country taxi trips, since over 90% of these trips are booked.

In addition, there is also the question of rebalancing the fixed and variable charges in country areas. There is no apparent rationale to the current practice of applying all of the relative increase in the country fare to the distance charge. VTA has

questioned whether this approach is based on costs. In the absence of any cost causation behind this approach, the Commission's preliminary conclusion is to rebalance fixed and variable charges in country tariffs so that they have the same relativity as in the Metropolitan area.

The Commission considers that these adjustments address the issues raised by stakeholders relating to the balance between fixed and variable charges.

In country towns and cities, taxi services have a defined taxi operating area which extends to a perimeter around the town boundary. Trips outside this boundary, or some conveniently defined zone, can result in additional 'dead running' for taxis.

There is limited permission for negotiable fares for certain trips with origins and destinations outside the taxi operating zone, or for trips greater than 80 km. However, these rules do not appear to address all of the circumstances when extra costs may be incurred. Thus the Commission considers that the scheme in Victoria could be modified by taking into account all of the circumstances where all or part of a taxi trip may be outside the normal taxi operating zone, and having regard to the estimated directly attributable distance-related costs of 68 c/km.

Surcharges

The Commission has considered the appropriateness of selected surcharges, including time of use surcharges and the surcharge for pre-booked premium service taxis, and whether the latter should form a permanent part of the taxi fare structure.

Time of use surcharges

The Victorian taxi fare structure has two 'time of use' surcharges:

- The Late Night Surcharge in the Metropolitan Zone, or 'Late Night Extra' in other zones, and
- The New Year's Eve surcharge applying in the country

The extent of Late Night Surcharges vary between zones.

- in the Melbourne metropolitan zone the Late Night Surcharge applies between midnight and 5am every morning, and represents a 20% surcharge on the total fare
- in the Melbourne outer suburban zone the Late Night Extra applies from midnight to 6am every morning, and is a \$1.30 surcharge
- in the regional and country zones the Late Night Extra applies from midnight to 6am every morning, and is a \$2.60 surcharge.

Various rationales have been put forward for the late night surcharges. For example IPART suggests that the late night surcharge is intended to compensate drivers for lower level of demand in late night periods, and to compensate drivers better in order to ensure a reasonable level of taxi service supply in night periods. The VTA suggests that surcharges on weekends and public holidays are desirable to effectively provide drivers with 'penalty rates' on these days, and to ensure all available cabs are on the road. Another rationale, not commonly canvassed, is that demand may be less elastic at times when public transport is not operating, and it may be economically efficient to charge a higher price at those times, thereby

recovering a relatively greater proportion of indirect costs from the relatively less price-sensitive demands.

Comparisons with other jurisdictions suggest that if the late night surcharge were broader in its application, it should be at a lower level. However, there is insufficient evidence that a broader application of the Late Night Surcharge to weekend day-time periods would address identified supply shortcomings during those times.

In the Commission's view there does not appear to be sufficient basis for altering the current 20% Late Night Surcharge that applies to the periods from midnight to 5am each night-time in the metropolitan area.

A number of submissions raised concerns about the lack of consistency as between the application of the Late Night Surcharge between the metropolitan and the Outer Suburban zones. The Commission is not aware of any rationale for this inconsistency. Similarly, while a number of stakeholder have identified concerns about the lack of availability of taxis in some country areas at night-time, no reasons have emerged as to why the night-time surcharge applying in country areas is lower than in the Metropolitan area.

Therefore the Commission sees merit in having consistency between the metropolitan, outer suburban, regional and country zones with respect to the application of the late night surcharge/extra. That is, the application of a 20% higher fare in the periods from midnight to 5am should apply in all zones.

The purpose of surcharges is to provide incentives to ensure that all cabs are on the road in peak periods and to balance demand with an efficient supply of cabs without an over-supply in off-peak periods. In recent years a New Year's Eve (**NYE**) surcharge of \$5.50 has applied in country areas.

The comments received in the Commission's consultations indicate that the NYE surcharge does provide adequate incentive to taxi operators. However, comments received also suggest that the surcharge is considered to be relatively high, and as a result, taxi operators often waive it.

If the Late Night Surcharge were to apply to certain public holidays where there are significant taxi supply shortfall issues, then greater simplicity in the fare structure could be achieved by also applying the Late Night Surcharge on New Year's Eve. This is the Commission's preferred approach. However, the surcharges should not be applied broadly, but only to those days of the year when the most significant supply shortcomings are likely to emerge. The Commission's preliminary view is that these days are Christmas Day, Boxing Day, New Year's Eve and New Year's Day.

Premium service taxis

Two taxi depots provide premium, or 'Silver Service', taxis to their passengers, Silver Top Taxis and Black Cabs. Silver service offers customers a higher quality vehicle than most ordinary taxis, as well as more experienced drivers. Silver Service taxis attract an additional \$11 pre-booking fee where a Silver Service cab is specifically requested, although such taxis can also service conventional bookings or the rank and hail market as ordinary taxis without imposing this fee.

While the Premium Service Surcharge generates additional revenue for taxi firms, it is also clear that premium service vehicles carry higher costs as well. Specifically, the vehicles used are more expensive than standard taxi sedans.

The provision of premium services has traditionally been the hallmark of the hire car industry – a market that is separated from taxis through regulation. Hire cars can only offer services to customers who pre-book – they are private carriers, not common carriers as taxis are in servicing rank and hail market segments. While Silver Service taxis and their drivers continue to operate in the rank and hail markets, it is only in pre-bookings that the premium service (and the surcharge for it) is found to apply. Furthermore, hire cars tend to use higher quality vehicles, such as the Holden Statesman or Ford Fairlane, which are precisely the vehicles being used for Silver Service.

Both the taxi and hire car industries have previously argued that their two markets are quite distinct. However, the Commission considers that there is a degree of competition between taxis and hire cars in key market segments, such as the transport of passengers to and from the airport. The degree of substitutability is highest in those segments in which premium services operate.

Of particular interest is the pre-booked taxi market. The pre-booked market has much greater scope for consumer choice, and in principle, operates like most other markets. For these reasons, opportunities that provide greater scope for competition in the pre-booked market should be identified and implemented.

One of the options is to remove artificial constraints to competition between taxi service providers in this market. One reform to this end would be to adopt a system of 'posted prices', by which taxi companies can substitute alternative (discounted) tariff schedules to replace those determined by the regulator or Minister. Taxi firms would be able to set their own prices for pre-booked services.

Another set of options is to remove artificial constraints to competition between taxis and hire cars. At present, hire cars are prohibited from having a fixed fare schedule – for example, a price per kilometre, or per passenger. They must agree a total fixed fee for the journey before it commences. This constraint to the pricing of hire car services is highly unusual, and appears to be directed to limiting their effectiveness as competitors to taxis by preventing customers from being able to make clear price comparisons. It is recommended that this constraint be removed, thereby enabling hire cars to pursue pricing strategies that most effectively enable them to compete with each other and with taxi and other passenger services.

Distribution of income

The Commission is required to report on the distribution of taxi fare revenue and measures that may be considered by Government to improve taxi driver remuneration.

In framing options the Commission has had particular regard to the overall objectives for the taxi industry. These objectives include improving customer service standards, providing suitable careers for taxi drivers in the industry and the sustainable provision of taxi services by operators, as well as affordable taxi services for users.

Taxi fare revenue is divided between the four main types of industry participants: taxi operators; drivers; depots/networks; and licence holders.

- Taxi operators retain the revenues not allocated to drivers and pay for the costs of operating and maintaining the taxis. They also pay network fees to depots/networks and licence assignment fees to licence holders. Their income depends on the payments to the other industry participants.
- Drivers' share of fare revenue will depend on the terms and conditions of bailment agreements. In Victoria approximately 95% of all non-operator drivers are engaged under a 50/50 revenue sharing arrangement, and typically do not pay for fuel costs.
- Depots/networks receive network fees from taxi operators. These fees recover the costs of a range of services, but as there is a high degree of concentration in depots, they are likely to also include an element of 'monopoly rent'.
- Licence holders receive assignment fees from taxi operators for the rental of licences. Licence assignment fees are determined in a market for licence assignments. This market is characterised by a large number of prospective taxi operators and a limited supply of licences, suggesting that licence holders are able to extract significant monopoly rents.

Some individuals have more than one of these roles, but the focus in this report is on their separate capacities, as a driver, licence holder or operator, for example.

Driver remuneration

Driver remuneration is governed by bailment agreements. Almost all drivers who are not licence holders or operators are sub-contracted to operators through these agreements, which specifically exclude any relationship of employment, agency, partnership or franchise¹. Instead, bailee drivers are classed as self-employed. Note, however, that the question as to whether the relationship between a driver and an operator is one of bailment or employment depends on the circumstances of the relationship.

Bailee drivers in Victoria face different options for "bailing" a taxi-cab. By far the most common option is to pay a fixed percentage of the fare revenue (as recorded by the taximeter) to the operator, with drivers retaining 50% of the fare revenue.

The results of the latest PwC survey of taxi drivers and operators indicate that the average taxi driver income in Victoria in 2007 was \$13.20 per hour. This does not include tips, which accrue to the driver under the bailment agreement. This estimate of driver income is significantly higher than previous estimates published by the Commission in its 2005 Taxi Fare Review of between \$7.50 and \$8.00 an hour. However it is broadly consistent with information in submissions received from taxi drivers.

While driver remuneration is regarded as relatively low, there are other, non-pecuniary characteristics of work that drivers may find favourable. According to Victorian Taxi Directorate (VTD) surveys, drivers obtain satisfaction from being their own boss and from their service to the public. Another advantage is flexibility

¹ Victorian Taxi Association (VTA) 2002a, "Taxi Cab Bailment Agreement", p. 17.

in working hours. Given their study commitments, flexibility in working hours may make taxi driving an attractive profession for some students.

The taxi industry displays high driver turnover. A survey of taxi drivers carried out by DOI has found that only 55% of drivers are satisfied with taxi driving. In addition driver surveys suggest that a high proportion of drivers tend to leave the industry after less than five years. The implication of this high driver turnover is more inexperienced drivers with insufficient local knowledge, which in turn may detrimentally affect service quality to consumers.

There is concern that drivers face a lack of choice in bailment arrangements. The VTA has established a standard bailment agreement, which is used extensively throughout the industry. The Transport Workers Union (TWU) has noted that the VTA's standard bailment agreement is offered throughout the industry on a "take-it-or-leave-it" basis

The lack of choice in bailment arrangements may arise due to market power. KPMG has previously identified this as a potential shortcoming of the current arrangements, noting in particular the importance of depots in the recruitment of drivers for operators, and their ability to "closely co-ordinate their activities through the VTA". This produces an imbalance in bargaining power and results in lower incomes for drivers than a more open and competitive market would be likely to achieve.

Depots

The core function of network service providers is to take telephone bookings and despatch cabs to those jobs. However, networks also carry out a range of other functions, including quasi-regulatory functions in relation to taxi drivers, and support services for taxi operators and drivers.

Outside the metropolitan area, depots may be co-operatives between taxi operators, or fully integrated with the operations of a single taxi operator. This would tend to constrain network fees, although the costs of network operations will typically be higher on a per cab basis.

Market conditions for depots are characterised by highly imperfect competition. In the metropolitan area there are two dominant network service providers. Entry is restricted by the constraint on the number of depots approved by the VTD, but network fees are not regulated. The incumbent depots would also hold a substantial cost advantage over smaller networks due to the economies of scale of call-centre networks. For these reasons it is expected that network service providers have some pricing power.

Operators and licence holders

Operators are the key link between licence holders, drivers and depots. Operators share the fare revenue with drivers under the terms of a bailment agreement. The operator pays for the costs of the vehicle and other operating and maintenance costs, as well as paying network fees to depots and assignment fees to licence holders.

The supply of licences is fixed by the Government. The demand for licences is the maximum amount that operators are willing to pay when they enter into a licence assignment contract, which is based on their expected operating profits. Due to the

large number of potential taxi operators (as exemplified by the oversubscription of licence releases) compared to the constrained supply of licences, the bidding for licence assignments tends to drive operator returns to a minimum level. This process for establishing licence assignment fees ensures licence holders capture the economic rents, with licence values being the capitalised value of expected future rents.

The observed steady increases in the level of licence assignment fees support the Commission's perception of an increasing scarcity value of licences. The current "Green Top" program releasing 100 extra plates per annum (or 2.2% of the fleet) does not appear to have been adequate to meet demand. Relaxing supply constraints to expand the release program should be considered.

Improving driver remuneration

The Commission has identified two key issues that give rise to relatively low driver incomes:

- standardised bailment agreements, under which drivers are treated as self-employed sub-contractors rather than employees;
- the disproportionate share of profits being absorbed by licence holders. Were assignment fees lower, greater income could be shared by operators and drivers.

Other issues related to driver remuneration include driver turnover, training, and achieved customer service levels.

In considering options to improve driver remuneration the Commission has considered a range of options which would affect different industry participants in different ways (either directly or indirectly) and in so doing would re-balance the distribution of income towards drivers. Options involving taxi operators include direct controls over bailment agreements and increased transparency of bailment arrangements. Another option focused on drivers involves improved driver training. The income accruing to licence holders would be affected by direct controls over licence assignment fees, and/or indirectly by an increase in the number of licences issued. Similarly changes in the regulation of network operators would affect the distribution of remuneration indirectly.

Impact of fares

The expected effect of a fare increase on industry participants is that, while licence holders and possibly depots can be expected to benefit by having greater ability to push assignment fees and/or network fees higher, taxi operators may not obtain much benefit if assignment fees increase further in response to the fare increase. Driver incomes (and the incomes of operators in their capacity as drivers) might increase proportionately with any increase in industry revenue under current bailment arrangements. However, given the relatively weaker bargaining position of drivers, there is a risk that drivers may not achieve some or all of this gain if bailment arrangements change (as is reported to have occurred recently in relation to the 4.2% fare increase in March 2008). For these reasons a fare increase is not considered to be an effective method of improving driver incomes.

Options involving taxi operators: increased regulation of bailment agreements

Options for increased control over bailment agreements include:

- encouraging fixed pay-in terms and establishing maximum pay-in amounts
- mandating income shares within revenue sharing arrangements or
- hypothecating income from specific charges to drivers.

The benefits of the fixed pay-in method are that it provides certainty of revenue to operators and encourages drivers to operate the cab efficiently to maximise returns, because the driver keeps all of the residual income net of fuel costs (rather than 50% of revenue under the 'Commission' method). The fixed pay-in approach also improves the remuneration of more experienced or productive drivers, while discouraging new drivers, who do not have the skills and knowledge to maximise fare revenue.

Mandating income shares would require the involvement of a regulatory authority. Problems with this approach include identification of the appropriate regulatory body and availability of sufficient expertise to establish an appropriate rate of revenue sharing. The Commission's role as an economic regulator would not normally extend to advising on wage rates. The VTD is primarily a regulator of service quality and safety standards. Victoria comes under the Federal industrial relations jurisdiction, and therefore, perhaps the appropriate regulatory body would be the Australian Industrial Relations Commission. In addition, there may be a problem with the extent of Government intervention implied under this option.

A further alternative would be to hypothecate different parts of the fare schedule to drivers. This approach could involve apportioning different fare components, such as the flagfall, detention and distance rates, between drivers and operators. Such an increased regulatory approach would necessarily take precedence over any distribution set out in bailment agreements. Ultimately this approach is similar in its implications to mandating revenue shares. Underlying any calculations of this kind would be assessments of appropriate minimum wage standards, which may be problematic for a taxi fare regulator. It is potentially less flexible than mandating revenue shares, implying greater risk of unintended consequences.

The imposition of tribunal regulation of bailment agreements through the setting of maximum pay-ins for each shift or mandating the revenue sharing would represent a significant market intervention. Such an increase in regulation would need to be justified under National Competition Policy (NCP) requirements.

Moreover, the Commission is concerned that if the intent of policymakers is to improve driver remuneration, then regulating bailment agreements could lead to increased cost pressures on operators. In the absence of other offsetting cost reductions, or an increase in fares, increasing the percentage retained by drivers (whether directly or by increased hypothecation) would improve driver remuneration but would reduce operator revenues.

The Commission believes that options that impose additional regulation over bailment agreements without addressing the market power levied by licence owners do not provide a satisfactory solution. However such options could be undertaken in conjunction with initiatives to curb licence assignment fees (which are considered in the following section). It is important to weigh the need for increased regulation against less intrusive options for improving the revenue share of drivers.

Options involving taxi operators: increased transparency of bailment agreements

The available research suggests that there is considerable uncertainty in relation to how many drivers have signed bailment agreements. In these circumstances there is some uncertainty in relation to whether some drivers are employees or contractors. There is also evidence that central industry bodies have a significant coordinating role, and taxi operators appear to have an ability to unilaterally vary bailment terms and conditions.

In the Commission's view greater transparency for bailment agreements may be of merit, with possible measures including registration of all agreements with the Victorian Civil and Administrative Tribunal, the VTD or a separate government agency, or by providing for collective bargaining by drivers to increase their power in negotiations.

Options involving taxi operators and drivers: improved training

The surplus supply of relatively unskilled drivers available puts downward pressure in taxi driver incomes, and weakens their bargaining position when agreeing bailment terms. Requiring a greater amount of training by new drivers would increase the costs of entering into the industry for new drivers, and by doing so, would strengthen the bargaining position of experienced drivers. It therefore could be expected to contribute to improved driver remuneration. In addition to this benefit, increased training requirements would also benefit taxi customers, and thereby improve customer satisfaction. The Commission therefore considers that increased driver training requirements would have benefits to both drivers and customers.

Options involving licence holders: increased regulation of licence assignment fees

Options for improving driver incomes include introducing regulatory controls over assignment fees, or restrictions on the types of persons who can hold a taxi licence.

A cap on licence fees could be implemented in the form of a fixed dollar amount, or a fixed proportion of fare income.

A fixed dollar cap would result in a re-distribution of fare income away from licence holders to operators and potentially drivers. With no increase in fares this redistribution of income would only improve remuneration for drivers if their agreements with operators provide for a change to the standard 50/50 split of gross fare revenue, or if separate regulation of bailment agreements is imposed. The difficulty with this approach is determining the appropriate assignment fee and a mechanism for it to be reviewed.

An alternative approach is to cap the proportion of fare revenue that is paid to licence holders. The impact on drivers and operators would be similar to a cap, as discussed above, however under this arrangement licence holders' returns would be more directly linked to fare levels and industry performance in terms of trips per cab. This would have the advantage that licence values more closely reflect available returns rather than being based on the holder's ability to extract value through rises in assignment fees. On the other hand licence holders would be affected by licence release programs, possibly complicating the issue of compensation. If regulation of taxi fare revenue distribution is introduced the challenge will be in identifying what proportion of revenue operators, licence holders and drivers should receive.

Proposals to limit who can hold a licence (e.g. only a taxi-cab operator) would narrow the buying side of the market, and therefore inevitably affect licence values. However, it need not reduce the rent captured by licence holders and there would be less transparency within which to make such an assessment.

The Commission believes that implementing controls over licence assignment fees would improve driver remuneration, particularly if accompanied by other initiatives that could be expected to improve the driver share of revenue. However, this represents a substantial increase in the amount of regulation, and careful consideration is required as to whether improvements in driver remuneration can be achieved by other means, as discussed below.

The adoption of controls over licence assignment fees in Victoria would be a significant intervention, and by implication it would need to be demonstrated (in accordance with NCP) that the benefits outweigh the costs, and that there is not a less intrusive option to achieve the same objective.

Options involving licence holders: increasing the number of licences

A significant distortion to the distribution of income within the taxi industry comes as a result of entry restrictions, which enshrine and reward rent-seeking. Increasing the release of licences reduces the scarcity rent attaching to licences and would thereby reduce cost pressures on taxi operators. In addition reduced customer waiting times as a result of an increase in the number of cabs available tends to stimulate demand, and thereby compensate operators, in part at least, for the increased number of cabs in operation.

One option for increasing the number of licences would be to utilise a market based mechanism for issuing new licences, by way of an auction. A related approach could be to link the number of licences issued to a performance indicator such as waiting time or unmet bookings, or a demand indicator such as taxis per head of population. Under the performance indicator option, licences would be released if pre-specified performance targets are not met. Relevant performance targets for conventional taxi services may include waiting times in peak hours and jobs not covered. Relevant performance targets for accessible services would be the performance outcomes for conventional taxi services. Once the target performance measures are achieved, licences would be issued only to maintain that performance level over time.

A challenge is identifying the appropriate performance target in the first instance. A failure at this initial step could have adverse consequences, either impacting on consumer welfare (if set too low) or driver and operator income (if set too high).

Were licences to play a less prominent role in terms of the overall industry cost structure, it is conceivable that the remuneration of taxi operators, and potentially drivers, would improve by reducing the substantial cost impost of licence assignment fees. The increased demand for drivers relative to the available supply, and – where licence releases are preferentially directed to taxi drivers – the increased opportunities for drivers to become operators in their own right, would underpin driver pay conditions and provide greater opportunities for advancement.

In the Commission's view the performance indicator approach to determining the licence release program has potential benefits. In particular, it can be well directed to establishing the required number of taxi-cabs to satisfactorily supply the peak

demand services. This approach should contribute towards the objectives of both improving customer satisfaction and improving driver remuneration.

The effect of issuing more licences would be to reduce assignment fees and hence licence values. As a consequence, if this option were adopted, the government may wish to consider a compensation scheme for existing licence holders. A variety of approaches to compensation have been adopted by different jurisdictions (see section 7.3.6).

Options involving network service providers: reduced regulation

The requirement for all taxi operators to be affiliated with an approved depot, together with a restrictive test applied to the approval of depots by the VTD, has conferred a monopoly, or near monopoly franchises on incumbent network service providers. However, this has been done without any associated controls over network fees, or other forms of market conduct that may represent an exercise of market power.

Under the new accreditation processes there should be an emphasis on ensuring that there are no restrictions the entry of network service providers or secondary networks within the approval processes. The application of less restrictive principles can be expected to provide a greater range of available options, and thereby reduce the network costs charged to taxi operators. This reduction in costs could potentially improve the remuneration of both operators and drivers.

Conclusions

Taxi driver remuneration in Victoria is low relative to other states and related jobs in other industries, and reflects a highly inequitable distribution of income throughout the industry. However, simply increasing what drivers must be paid will only result in a reduction of operators' income.

Ultimately there are three broad options to achieving improved driver remuneration:

- More regulation: mandating how various fare components should be distributed, and increasing controls on the relationships between different participants within the industry,
- Less regulation: reducing and removing barriers to entering the taxi industry to alleviate the cost burden on operators from assignment fees, allowing for a greater portion of revenue to be appropriated by drivers, and
- Intermediate solutions involving greater transparency and improved training.

The Commission regards carefully managed deregulation as the preferred option, in particular the issuing of additional taxi licences. This would remove the unnecessary costs associated with plate leasing that assignee-operators currently face, and provide greater capacity for driver remuneration to be improved. By lowering industry costs and improving service standards it would also stimulate demand for taxi and driver services.

However the Commission recognises that it might be appropriate to introduce a "package" of changes, with increased regulation in some areas being complemented by reduced regulation in others. Such a package could include the capping of licence fees, which are imposing a substantial cost burden on the

industry. In the absence of such controls there is a risk that the benefits of other reforms that are pursued will flow to licence holders.

On the other hand, the Commission is concerned that caution needs to be exercised in relation to the options for direct regulation of driver employment conditions. Such approaches may be difficult to administer and of uncertain benefit to the industry. The Commission recommends greater reliance at the present time on pro-competition options, and on complementary options such as greater transparency in relation to bailment arrangements and improved driver training.

The Commission recognises that further analysis is needed on the costs and benefits of the options and welcomes stakeholder feedback on them.

Information gathering and performance measurement

Information from the taxi industry is required by a number of different government bodies and stakeholders for a range of different reasons. The three main government bodies involved are the Commission, VTD and the Department of Transport (DOT). Each performs a different role and therefore collects information on the taxi industry from a slightly different perspective:

- *economic regulation.* The ESC has responsibility for providing recommendations on fare adjustments and fare adjustment mechanisms. For this it requires measures of taxi usage, the costs and revenues of taxi operations, the distribution between industry participants, and service quality measures;
- *service standards and entry regulation.* The VTD is part of the Public Transport Division of the DOT. It regulates the operations of the taxi industry and is responsible for the new accreditation process. It is responsible for implementing initiatives to improve the quality of services provided by the taxi industry. It is therefore interested in many aspects of the performance of taxi operations, including quality of service, customer satisfaction and complaint handling; and
- *Government policy and strategy agency.* The DOT is responsible for transport planning and requires comprehensive information on the levels and profiles of demand and any emerging trends in this area.

In undertaking this Review the Commission has identified a number of sources of information on the taxi industry. While these sources are incomplete, and provide limited information on a number of aspects of the industry's operations, the arrangements for accreditation will increase the significantly the amount of information available.

The main information sources are:

- the quarterly customer satisfaction monitoring survey carried out by DOI (now DOT), and some 'one off' surveys carried out by VTD, for example of taxi drivers and in relation to the quality of service for passengers with disabilities, both in 2006.
- the periodic surveys of taxi operators and drivers undertaken by the Commission to support its fare reviews

To supplement this information for the purpose of this review, the Commission requested information from the metropolitan taxi networks in relation to bookings, types of services, number of taxis and waiting times. This information has only been partially provided to date. When complete it will compliment that collected

through the VTD Taxi Driver Survey and the Customer Satisfaction Monitoring Survey, to provide some different insights into taxi supply.

New sources of information that are not available for this Review, but which will be available in the near future include:

- the Victorian Integrated Survey of Travels and Activity (VISTA) which is currently being carried out, and
- information that it will be more readily sourced from the taxi industry under the new accreditation arrangements.

To ensure that all bodies have the required information to perform their respective regulatory tasks, information collected by each body should be routinely shared. One way to facilitate this would be for the Commission to indicate to DOT/VTD the information that it requires (that is currently collected) to undertake the fare determination exercise, and for this information be made available to the Commission on an annual (or other agreed timeframe) basis.

It will be important to streamline the information requirements imposed on the industry, so as to minimise the compliance burden and red tape imposed on network service providers and taxi operators.

Performance monitoring

A key use of information is the reporting of identified measures of performance and comparison with established targets, to determine whether taxi services are meeting expectations and performing at an acceptable level. The Commission sees these being reported in an industry performance monitoring report, preferably every six months. A report of this kind would publish Key Performance Indicators (KPIs), as well as statistical information on taxi use.

KPIs should be developed that focus on a range of service quality measures from customer satisfaction to overall industry efficiency and profitability. These measures should be indicators of the adequacy of the supply of taxi services in meeting demand, sustainability within the industry and overall trends in performance over time. The report should at least contain customer satisfaction results from the current customer survey, performance against benchmark KPIs, and complaint handling outcomes.

Although a wide range of KPIs should be reported, to avoid having a plethora of targets, only selected KPIs commonly have associated performance targets. The following KPIs and associated performance targets are recommended for the Victorian taxi industry. In each case, the indicators should be separately reported for wheelchair users and for all other users:

1. Per cent of calls that are answered by booking service within 30 seconds, 1 minute and 2 minutes, and the average time taken to answer a call in seconds.

If energy call centre performance is a useful guide, then appropriate performance targets for telephone answering times may be: 75% of calls answered in 30 seconds, and an average call answering time of 40 seconds².

2. For bookings for immediate pick-up, the per cent of taxis to arrive within 10, 15 and 30 minutes separately reported for peak periods (as defined in the accreditation regulations, namely from 7.30am to 9.00am and 3.00m to 4.30pm, Monday to Friday, and from midnight Friday to 6.00am Saturday and from midnight Saturday to 6.00am Sunday), and for non-peak periods.
3. For bookings to arrive at a set time the percent of taxis that arrive within 5 minutes of the nominated time, reported for peak periods and for non-peak periods.

For pre-booked jobs at a scheduled time, appropriate targets (following WA) may be: 85% within 5 minutes of the nominated time during peak times, and 90% within 5 minutes during off-peak times.

Consideration should be given to reporting KPIs for metropolitan and country services separately and whether all of the performance standards that are to be applied to metropolitan services are appropriate for country services.

It is important that Victorians using WATs and/or members of the MPTP receive the same level of service as all other taxi users. In order to determine whether services levels are the same, industry KPIs should be reported separately for standard services and for MPTP and WAT services. This would allow a comparison to be made and eliminate the need to develop a separate set of KPIs.

The complaints process should be accessible to those with a disability. There should be the ability for complaints to be made in writing, by phone, by email or even by SMS. The process for making a complaint should be clear and information made available as to what the process is.

If performance monitoring reveals that there are significant differences in the level of service being provided to WAT users and other taxi customers, further WAT licences should be released until this difference is removed.

Affordability and availability

The affordability and availability of services to users, particularly people with disabilities or who are remote from public transport and are not able to drive a car, is an important issue for the Commission's review.

Subsidies to disadvantaged users

The Multi-Purpose Taxi Program (MPTP) is the government's subsidy program for 'people who have a severe and permanent disability and who, because of that disability, are unable to independently access bus or tram services. There are approximately 178,000 MPTP members, 80% of whom are over 60 years of age, and 70% are over 70 years of age. The scheme covers approximately 3.6% of Victoria's population.

² Essential Services Commission '2006-07 Energy Retail Performance – Consumer Snapshot'

Members of the MPTP must live in Victoria, have a severe and permanent disability, and have a disability that means they cannot use public transport independently. They also must either use a wheelchair all the time, hold a Department of Veterans' Affairs Pensioner Concession Card or gold Repatriation Health Card, hold certain Pensioner Concession or Health Care Cards from Centrelink, or be able to show they have financial hardship. A doctor must also complete a section included in the persons MPTP application form.

The MPTP scheme provides a subsidy to MPTP members equal to 50% of the taxi fare. These subsidies are subject to a maximum subsidy of \$30 per trip, and a maximum overall subsidy per member of \$1045 per year. The annual subsidy limit does have some exemptions.

Taxi operators and drivers argue that WATs should receive the wheelchair lifting fee for all wheelchair users, not just those who are MPTP members. This argument appears to have merit, so that there may be benefit in providing for temporary MPTP membership to wheelchair users who are not permanently disabled.

There is also a question about the wider application of subsidies to non-disabled elderly people, or other disadvantaged users, in areas where other forms of public transport are not available. While the MPTP caters for those with a severe and permanent disability, there are currently no taxi concessions for seniors who lack the capacity to drive and don't have access to public transport.

The case for discounted taxi transport for seniors is strongest in regional and rural areas. These areas often lack public transport infrastructure, effectively leaving taxis as the only public transport providers. However, even in metropolitan areas, public transport options may not be practical, due to accessibility or timetabling, resulting in reliance on taxis.

The subsidy of 50% of the taxi fare is broadly comparable to other Australian jurisdictions. Although higher rates of subsidy are available in some European countries, the interstate comparisons are perhaps a better guide on this question.

VCOSS and DHS have expressed concerns to the Commission about the \$30 trip subsidy cap. DHS has indicated that it leads to inconsistency in the availability and affordability of services for some MPTP members in country areas, and that it impacts on the financial viability of taxi operators in remote areas of Victoria. There is also a view that the observed data, which shows that a high proportion of trips fall within the cap, does not provide a true picture due to the discouraging effect of the cap on longer trips. Similar views were expressed by the Ministerial Advisory Council of Senior Victorians.

The MPTP trip subsidy cap is not simply a matter of transport policy – it is also a matter of social policy – and therefore the views of DHS on this question should be given significant weight. For this reason, in the Commission's view, the Government should reconsider its position in relation to the MPTP trip subsidy cap.

The annual MPTP subsidy cap appears to impose a greater constraint than the trip subsidy cap, restricting the disabled person to approximately one return taxi trip outing per week. A user who has outings 3 to 5 times per week (return trips) could easily accumulate an annual taxi cost of up to \$8,000. Although some users can apply to have their annual subsidy cap relaxed, this appears to involve an undesirable amount of red tape. These observations suggest that the current

MPTP annual subsidy cap is significantly below relevant international benchmarks, and should be increased by several orders of magnitude if the government's social objectives are to be realised. The Commission's expectation is that the annual subsidy cap should be increased several fold. Therefore the Commission recommends that the Government consider additional funding for the MPTP scheme.

In an environment where a growing proportion of taxi trips will be servicing elderly and disadvantaged users due to the aging of the population, and where the Government is committed to ensuring that these users will have access to affordable transport services enabling them to participate in social activity and not be isolated, there is potential for an increasing reliance on taxi services to meet these needs. However, structural elements of the taxi industry, and in particular the private capture of economic rents associated with licence scarcity, presents a problem for the taxi industry in its ability to satisfactorily provide Government funded or subsidised services. It is difficult to reconcile the provision of Government subsidies to service providers with the presence of monopolistic power and the likelihood that part of this assistance may flow to private investors as windfall gains, which reinforces the need to address the market power of licence holders.

Wheelchair accessibility

To address the transport needs of people in wheelchairs, wheelchair accessible taxis (WATs) have progressively been introduced into the taxi fleet since 1983. At present approximately 8% of all taxis in Victoria are WATs, including 6% of taxis in Melbourne; 13% of taxis in regional urban areas; and 17% in country areas (see Table 2.1).

Subsidies for special services can be user-side subsidies (such as the MPTP program) or supply-side subsidies, where payment is made to the service provider. There are a number of supply-side subsidies for the provision of wheelchair accessible services.

The supply-side subsidies provided to facilitate the supply of WATs differ between the country and metropolitan areas. In country areas the supply-side subsidies include:

- A 'lifting fee' subsidy of \$10 is paid by the government to WAT operators each time they are engaged by a wheelchair user who has MPTP membership. A minimum of \$6.70 of this fee must be paid to the driver.
- Financial assistance is also available in certain circumstances to taxi operators for the purchase or fitting out of WATs (up to \$40,000). This scheme is particularly focussed on country operators switching a conventional taxi licence to a WAT, and financial need testing is not required in towns with less than 10 cabs.

In addition, further assistance to WATs is provided through reduced taxi licence rental fees, reduced stamp duty on new WAT vehicles, and greater vehicle maximum operating life compared to conventional taxis.

A different set of arrangements apply in the metropolitan zone. In addition to the \$10 lifting fee that applies in country areas, an arrangement has been in place since 2001 between the Government and the two major taxi networks in the

metropolitan area to handle all wheelchair bookings in the Metropolitan Zone. They receive a range of service fees including:

- a booking fee of \$3.30 per booking
- a pick-up fee of \$1.10 per pick-up for passengers over 4 km away
- a depot fee of \$100 per WAT per 28 days

The contract with the depots is believed to include performance standards for telephone answering response time and for the time of arrival of the taxi at the pick-up point. However, performance against these standards is not monitored.

While the provision of WATs is advantaged through the range of mechanisms indicated above, there is also support for the view that some part of the lifting fee should be used to compensate operators for additional maintenance costs of WAT vehicles, in addition to compensating drivers for the additional time spent in customer pick-up and drop-off.

The Commission's preliminary view is that the available information supports the allocation of the greater part of the lifting fee to the driver, as is presently the case. Under certain bailment arrangements (e.g. fixed pay-in) it would be appropriate for the whole of the lifting fee to be allocated to the driver. This view is dependent, however, on the assumption that future WAT licence rental fees will remain at a considerable discount to conventional licences.

Concerns have been expressed about drivers activating the meter prior to loading a wheelchair customer into the vehicle – thereby 'double dipping' with respect to the lifting fee. Information should be gathered specific to WAT jobs, which should be audited to enforce the requirement that meters are not activated for WAT jobs until the customer has been placed in the vehicle.

In the Commission's view the level of the lifting fee would appear to be adequate. Comparison with other jurisdictions indicates that lifting fees are not provided by the governments of New South Wales, Queensland, Western Australia or the Northern Territory. The ACT has a lifting fee of \$10 similar to Victoria, Tasmania has \$10-16, while South Australia has an on-time bonus of \$5.

To facilitate adequate services for wheelchair users the government needs to make available a sufficient number of WAT licences. However, recently traded values for WAT licences indicate that they are relatively scarce. A comparison between Australian jurisdictions of the proportion of WATs in each fleet in each capital city indicates that Melbourne has relatively fewer WATs than most other Australian capitals.

In Victoria, the WAT taxi fleet represents approximately 8% of all taxis. Most of the work undertaken by these cabs is non-wheelchair work. Waiting times tend to be higher for wheelchair bookings because when a booking is made that specifically requires a wheelchair taxi, it is more likely that the WATs in service will be thinly dispersed across the metropolitan area, and the average distance from the closest WAT to the pick-up point will commonly be longer than that for the average conventional taxi job. For this reason, the number of WATs in service may need to be a high proportion of the total fleet if the Disability Standards are to be achieved.

The options are to provide fully accessible taxis as part of, or as all of, the ordinary taxi fleet, or to provide an on-demand taxi sharing service designed mainly for

disabled people, but usable by other (non-disabled) people as well. The latter includes various flexible transport services, some of which are particularly useful in more rural areas where there are diverse travel patterns, and include scheduled flexible-route demand-responsive minibus services, for example. Such services are increasingly being used or trialled in Europe.

The Commission's preliminary view is that the Disability Standards will most likely and most efficiently be met by considerably increasing the proportion of WATs in the metropolitan taxi fleet. The preliminary conclusion is that the appropriate target is 15% of the metropolitan taxi fleet should be WATs. To increase the number of WATs to this level would require an additional 330 metropolitan WAT licences. In addition, once the planned conversion of 300 peak service licences to conventional licences is completed, a further 45 WAT licences would need to be released. WAT licences should be issued at a discounted annual rental to annual licences.

Community transport

There is a growing demand for taxi services by non-profit service providers, including home and community care services, and these groups as a rule do not receive any specific taxi-related subsidies. The provision of contracts with such organisations to provide specific taxi transport services to relevant individuals 'is a direction for the future' for the taxi industry.

One of the issues relates to the efficiency of procurement of community transport services, and whether taxi services could effectively compete for contracts to provide more of these services. According to DOI, appropriate procurement processes are not being adopted for community transport to ensure these services are obtained at the lowest cost. On the other hand, DHS has indicated to the Commission that community transport is almost entirely in the hands of bodies which receive funding from several sources, only one of which is Government. The funds allocated by Government are not specifically directed to community transport projects, and it is implied that Government does not have direct jurisdiction over how the community groups allocate funds. This question could be usefully examined further as part of a review specifically directed to public and community transport in regional and outer suburban areas.

A second issue that has been raised by stakeholders is the potential benefit of shared ride taxi services in the context of providing alternative forms of public transport, in regional areas or outer suburban areas. There are concerns that a number of bus services in country towns are under-utilised, and that taxis (specifically, high occupancy vehicles) could provide a comparable, or better service at lower cost. DOI has previously expressed similar views.

The Commission sees considerable merit in the further exploration of the benefits and costs (including budgetary implications) of adopting these types of transport services in Victoria, and reviewing whether such services could represent a substitute for conventional bus services in some locations.

Broader considerations

In addressing the terms of reference, the Commission has made a number of observations and conclusions relevant to the regulatory framework for taxi-cabs in Victoria. However, there is a risk in making recommendations with respect to parts of the regulatory framework to address specific issues, such as driver

remuneration, without also having regard to the broader context of the regulatory framework as a whole, and how those recommendations fit into a wider regulatory reform program.

Most of the developments in the industry over the last eight years have resulted in increasing regulation. Most disconcerting is the relationship between increasing regulation on the one hand, and the increasing degree of market power held by major network service providers and peak industry bodies, on the other. The Commission's recommended approach to the taxi industry is for the Government to progress pro-competitive reforms, wherever these can be identified, and wherever the case against doing so is insubstantial. The onus should be on the proponents of regulatory restrictions to demonstrate their public benefit.

More broadly, the Commission considers that the following objectives are relevant for the taxi industry and this Review:

- Vehicle and driver customer service standards, and the safety and reliability of taxi services, that meet the needs of the consumer
- Taxi waiting times that meet the needs of the consumer
- A fare that is acceptable to the consumer and consistent with the availability of taxi services
- Mobility and community accessibility for the elderly and disabled, and those without other means of transport.
- Taxi service standards for people with disabilities to be equal to those for able bodied people.
- A industry that is competitive and efficient
- Taxi driver remuneration that is fair and reasonable

In addressing the Terms of Reference for this Review the Commission has considered options that will be consistent with these objectives.

SUMMARY OF RECOMMENDATIONS

i The impact of LPG costs on taxi operators

The Commission's Interim Report (submitted to the Minister for Public Transport on 12 March 2008) addressed the question of the adequacy of fare levels in the light of the cost pressures on the industry including recent increases in the price of LPG. An interim fare increase of 4.2% was announced by the Minister on the 19 March 2008 and implemented in April.

ii Approaches to setting price paths

Price path formulas

The Commission sees merit in the use of a specifically constructed composite index of input prices, using a small number of published price indices relevant to Victorian taxi industry costs, including LPG price indices. Each index would be appropriately weighted to reflect relative importance of the inputs in total costs. The Commission's preliminary view is that a productivity adjustment would remain appropriate. Such a composite index will require re-weighting every 3-5 years to remain a reasonably accurate reflection of the taxi industry cost mix.

The proposed price path for the next 3-5 years would therefore be determined by a CIPI-X formula, where CIPI is the composite input price index, and X is the productivity adjustment.

The composite input price index (CIPI) proposed by the Commission is defined in Equation 4.1 and Table 4.2.

Timing of fare adjustments

Annual price adjustments are to be preferred to more frequent adjustments due to the costs of implementing fare adjustments.

The formulas for making annual fare adjustments are given by Equations 4.2 through to 4.4.

To save costs a materiality threshold for changing fares of 3% should apply with fare adjustments carried forward to the next year if less than 3%.

Productivity adjustment

Based on its preliminary productivity analysis the Commission's preliminary view is that an X-factor of 0.5% should apply over the next 3 to 5 years.

Current level of fares

The best available information the Commission has at the present time indicates that current fare levels are adequate to facilitate the financial viability of the industry and further 'one off' fare adjustments do not appear to be necessary at the

present time. There may be a case for a modest increase in fares in September 2008, and the formula described in section 4.2.2 is expected to provide for such an increase. The 4.2% increase in March is, at present, seen as having addressed, or substantively addressed, unit cost movements over and above CPI from 2005 to December 2007. However, the Commission welcomes other information on this question.

Licence assignment fees are imposing a significant burden on the taxi industry, and options should be considered to address this.

iii Fare structure issues

Booking fee

In all zones, metropolitan and country, the waiting time should consistently apply when the vehicle is operating at less than 21 kmph, and the waiting time charge should be calculated as 35% of the applicable distance based charge.

The booking fee should at least cover the directly attributable costs of servicing a booking, and taking into account some other disincentives relating to bookings, the Commission recommends that the booking fee be increased to a level slightly higher than the estimated directly attributable costs – i.e. to \$2.60.

There may be merit in exploring whether the taxi meter should be integrated with the despatch systems of primary or secondary networks, so that the booking fee can only be added to the meter for pre-booked hires.

Flag-fall and distance charges

The tariff structure should be modified in the following ways:

- The flag-fall charge to be reduced to \$2.60, which is approximately 80% of its present level, and the booking fee to be increased to equal the flag-fall charge
- The distance charge be retained at its present level.

Multi-user & shared hire rates

The high occupancy hiring tariff should apply when there are 5 users or more, or 2 wheelchair users (rather than 6 or more users as at present).

The multiple hirer tariff should be de-regulated. However, the respective rates applying to each passenger should be agreed by them at the commencement of the trip.

Country tariffs

The Commission does not recommend any change to the relativity between metropolitan and country distance charges.

The fixed and variable components of the country and regional tariffs should be rebalanced to reflect the same relativities as in the metropolitan tariff.

Where a customer is to be picked up or set down outside the normal operating zone of a country taxi operator (to be defined), the taxi fare should be negotiable, and agreed to by the hirer before the trip commences. This could be in the form of a positive or negative adjustment to the metered taxi fare, or an agreed up-front

amount. If it is an agreed adjustment to the metered fare, the following maximum adjustment should apply:

- (a) if a customer is to be picked up outside the zone and driven to a point inside the zone, a surcharge of 68 c/km can be charged for each km between the zone boundary and the pick-up point.
- (b) if a customer is picked-up outside the zone is driven to a destination outside the zone then a surcharge of 68 c/km could be charged for each km between the zone boundary and the pick-up point, and for each km between the destination point and the zone boundary, and
- (c) a customer picked up inside the zone is driven to a point outside the zone then surcharge of 68 c/km could be charged for each km between the zone boundary and the destination point.

iv Surcharges

Late Night Surcharge

There does not appear to be sufficient basis for altering the current 20% Late Night Surcharge that applies to the periods from midnight to 5am each night-time in the metropolitan area.

The Commission sees merit in having consistency between the metropolitan, outer suburban, regional and country zones with respect to the application of the late night surcharge/extra. That is, the application of a 20% higher fare in the periods from midnight to 5am should apply in all zones.

New Year's Eve surcharge

The NYE surcharge should be replaced by the Late Night Surcharge (i.e. 20%). This should apply equally to all zones. It should apply all day on Christmas Day, Boxing Day, New Year's Eve and New Year's Day.

Premium service surcharge

A more 'level playing field' should be established between taxis and hire cars by:

- adopting a maximum fare regime for pre-booked taxi services, under which taxi companies can post an alternative (discounted) tariff schedule to replace those determined by the regulator or Minister.
- removing constraints on hire cars offering scheduled fares, to enable them to compete more directly with pre-booked taxi services.

Within this context, the Commission sees merit in permitting the Premium Service Surcharge for pre-booked services where the customer specifically requests a premium service, and where the taxi-cab driver and taxi cab are authorised to do so.

The authorisation of a taxi cab and driver to provide premium services should be by permit issued by the VTD based on their meeting defined criteria.

v Distribution of income

The Commission has identified a number of options to improve driver remuneration, and invites comment on all of these options, and in particular the preliminary preferred options of:

- Increased transparency in the development, negotiation and conduct of bailment agreements.
- Increasing the number of licences to achieve specified performance targets or according to a market mechanism. Preferentially directing these to experienced drivers.
- Relaxation of the accreditation of network service providers/depots.
- Enhanced driver training requirements
- capping licence assignment fees through a fixed dollar cap or as a proportion of fare revenue, with an associated buy-back program.

vi Information gathering and performance measurement

A taxi industry performance monitoring report should be developed, and published every six months. This would include a broad range of indicators relating to booking service waiting times, wheelchair service waiting times, customer satisfaction, complaints statistics, and other information identified in chapter 8.

Key Performance Indicators (KPIs) should be developed that focus on a range of service quality measures from customer satisfaction to overall industry efficiency and profitability. These measures should be indicators of the adequacy of the supply of taxi services in meeting demand, sustainability within the industry and overall trends in performance over time.

The complaints process should be accessible to those with a disability. There should be the ability for complaints to be made in writing, by phone, by email or even by SMS. The process for making a complaint should be clear and information made available as to what the process is.

If performance monitoring reveals that there are significant differences in the level of service being provided to WAT users and other taxi customers, further WAT licences should be released until this difference is removed.

There is value in continuing the industry surveys for future fare setting processes.

vii Affordability and availability

Subsidies to disadvantaged users

With regard to the Multi-Purpose Taxi Program (MPTP) the Commission has made the following preliminary conclusions:

- examine options to reduce red tape in the application process for MPTP membership
- provide for temporary membership for people who are temporarily disabled and required to use a wheelchair.
- retain the MPTP benefit level at 50% of the fare.

- reconsider the Government position on previous proposals to Increase the maximum trip subsidy to \$50
- a several-fold increase in the annual MPTP subsidy cap should be considered.

Wheelchair accessibility

The process for issuing WAT licences in future should have regard to the service quality performance of provided to wheelchair users compared to the standards achieved for able-bodied users. That is, more WAT licences would be issued if the Disability Standards requirements for equal service standards are not met.

To facilitate achieving the Disability Standards of equal taxi response times for disabled persons, an additional 330 metropolitan WAT licences should be issued to raise the proportion of WATs in the metropolitan taxi fleet to 15%. This proportion of WATs in the metropolitan taxi fleet should be maintained as a minimum.

Alternative vehicle types should also be considered for use as WATs.

The subsidies currently paid to the two major metropolitan depots in relation to WATs would not appear to be necessary if the recommended increase in WAT numbers is adopted.

Community transport

The Commission's preliminary recommendation is for a review of community based transport services in Victoria. The Review could examine procurement of transport services, and should have particular regard to the benefits and costs of establishing scheduled shared-ride flexible route transport services, using mini-buses in some relatively low density towns or suburbs. For example, the Essential Services Commission or VCEC could be directed to undertake such a review.

viii Broader considerations

The Commission considers that the following objectives are relevant for the taxi industry and this Review:

- Vehicle and driver customer service standards, and the safety and reliability of taxi services, that meet the needs of the consumer
- Taxi waiting times that meet the needs of the consumer
- A fare that is acceptable to the consumer and consistent with the availability of taxi services
- Mobility and community accessibility for the elderly and disabled, and those without other means of transport.
- Taxi service standards for people with disabilities to be equal to those for able bodied people.
- A industry that is competitive and efficient
- Taxi driver remuneration that is fair and reasonable

In addressing the Terms of Reference for this Review the Commission has considered options that will be consistent with these objectives.

The Victorian taxi industry is subject to regulation under the *Transport Act 1983*. Under this framework each taxi operator must be licensed and the taxi fares are set by the Minister for Public Transport³ under s.144A(1) of the Act. However, under s.144A(2) the Minister must obtain a report from the Commission prior to changing the schedule of taxi-cab fares (a report from the Director of Public Transport must also be obtained).

In 2005 the Commission undertook a review of Victorian taxi fares, and made recommendations for setting prices over the period from 2005 to 2007.

On 19 September 2007, the Minister for Public Transport (**Minister**) directed the Essential Services Commission (**Commission**), under section 186(1) of the *Transport Act 1983* and by notice in the Victoria Government Gazette on 14 September 2007, to undertake an independent review of taxi-cab fares in Victoria by 30 June 2008. On 14 January the Acting Minister for Public Transport provided amended terms of reference to the Commission.

This Review will provide recommendations in relation to price paths applicable from September 2008 for a three to five year period.

1.1 Terms of reference

The Terms of Reference of this review are reproduced in Appendix A.

In summary, the Minister for Public Transport has given notice that in accordance with the provisions of section 186 of the *Transport Act 1983*, the Commission is required to conduct an investigation into Victoria's taxi-cab fares and report on:

- the impact of further and sustained upward pressure on liquid petroleum gas (**LPG**) prices on taxi operators. The Commission was required to provide an Interim Report on this subject which was submitted on 12 March 2008
- an appropriate price-setting model to provide for automated fare adjustments for the next 3-5 years, including the timing of such adjustments
- the appropriateness of the taxi fare structure within the current market
- appropriateness of selected surcharges, including the New Year's Eve non-metropolitan taxi surcharge, and a surcharge for pre-booked premium service taxis, and whether they should form a permanent part of the taxi fare structure
- the distribution of taxi fare revenue and measures that may be considered by Government to improve taxi driver remuneration, and

³ This is a condition of the taxi-cab licence as provided for under s.144(2)(d) of the Act.

- information reporting by the taxi industry and performance measurement.

In undertaking the review, the Commission is required to take into consideration several matters including:

- the cost pressures on the industry regarding the increase in the price of LPG
- the findings of its Taxi Fare Review 2005 and the country taxi fare review undertaken by the DOI in 2005/06
- the impact on Victorian business and the community, the taxi industry and to issues such as the availability and affordability of services to customers, and
- the impact on taxi industry participants including licence holders, taxi operators, drivers and employees.

The Commission must also have regard to its statutory objectives in s.8 of the *Essential Services Commission Act 2001 (ESC Act)*, and must provide its final report to the Minister by 30 June 2007 (see section 1.4 below in relation to the revised submission date).

1.2 Objectives

The objectives of the Commission in s.8 of the ESC Act include the primary objective to protect the long term interests of Victorian consumers with regard to the price, quality and reliability of essential services. The facilitating objectives include:

- to facilitate efficiency in regulated industries and the incentive for efficient long-term investment;
- to facilitate the financial viability of regulated industries;
- to ensure that the misuse of monopoly or non-transitory market power is prevented;
- to facilitate effective competition and promote competitive market conduct;
- to ensure that regulatory decision making has regard to the relevant health, safety, environmental and social legislation applying to the regulated industry;
- to ensure that users and consumers (including low-income or vulnerable customers) benefit from the gains from competition and efficiency; and
- to promote consistency in regulation between States and on a national basis.

1.3 Process for conducting the Review

Section 187 of the *Transport Act 1983* specifies the manner in which the Commission must undertake its investigations. The Commission may conduct an investigation in any manner it deems appropriate, may receive written submissions or statements, hold public hearings and may consult with any person that it considers appropriate.

An Open Letter was published on 10 October 2007 informing the public of the review and outlining the timeframes that the Commission adopted. An Issues Paper was released on 3 December 2007.

A period of eight weeks was provided for public submissions⁴. Submissions to the Issues Paper were received from: two taxi drivers Mr David Griffiths and Mr Wally Hunt, the Department of Human Services (**DHS**), the Department of Infrastructure (**DOI**), the Victorian Council of Social Service (**VCOSS**), the Victorian Taxi Association (**VTA**), the Victorian Taxi Directorate (**VTD**), and Mr David Walsh.

Public forums were held:

- on 19 February in Bendigo
- on 26 February at the Commission's offices in Melbourne, and
- on 4 March in Morwell.

The Commission submitted its *Review of Taxi Fares 2007/08: Interim Report* to the Minister for Public Transport on 12 March 2008. The advice contained in the Interim Report formed the basis of a 4.2% increase in taxi fares announced by the Minister for Public Transport on 19 March, and implemented from 12 April 2008.

Following the public forums, further material was submitted by some interested parties, including: submissions from Mr John Glazebrook and Mr John Kecskes; the VTA submitted copies of letters from the VTA to the Director of Public Transport and cost estimates from fleet operators; Ms Kerryn Robinson provided records of taxi trip data; and the Mildura Rural City Council submitted some relevant correspondence from the Council to the Minister for Public Transport.

Shortly before the release of the Draft Report, some further submissions were received. Due to their timing, those submissions could not be considered by the Commission in preparing this Draft Report. However, they will be placed on the Commission's website and taken into consideration together with the submissions made to this Draft Report, when the Commission develops its final findings.

Commission staff also met with a number of stakeholders and obtained further information and perspectives. These included the Ministerial Advisory Council of Senior Victorians, DHS, VTA, the Victorian Taxi Drivers Association, a representative of the Western Australian Department of Planning and Infrastructure, Black Cabs Combined and the VTD.

On 31 January the Commission made an information request to all five network service providers in Melbourne and its outer suburbs. Following this, on 2 April 2008, a draft information notice was issued by the Commission to the two major depots: Black Cabs Combined Pty Ltd (**Black Cabs**), and Silver Top Taxi Service Pty Ltd (**Silver Top**). Some of the requested information was provided on 22 and 23 April 2008.

⁴ In relation to comments made by the VTA in relation to the adequacy of the consulting period, it should be noted that the period of 8 weeks provided for submissions was considerably longer than the minimum consultation period of 3 weeks stated in the Commission's *Charter of Public Consultation and regulatory Practice*, thereby adequately allowing for the Christmas/New Year period.

1.4 Review timetable

On 14 May 2008, the Commission requested an extension of time to 19 August 2008 submit the Final Report of the Review.

Under section 190 of the *Transport Act 1983*, the Minister must make the Commission's Final Report public within seven sitting days of Parliament or within 30 days if Parliament is not sitting. However, the Act does not require the Minister to accept the Commission's recommendations or specify when the Minister must make a decision about the adjustment of taxi fares following receipt of the Commission's advice.

1.5 Making a submission

The Commission recognises the benefits of public consultation and stakeholder feedback to test and improve on its analysis prior to making its Final Report. Comments on the matters discussed in this Draft Report – including pricing questions as well as the reform options put forward – or alternative suggestions are encouraged.

Submissions in response to this Draft Report must be made by Tuesday 1 July. Submissions can be sent electronically to: taxiconsultations@esc.vic.gov.au or by mail to:

Taxi Consultations
Essential Services Commission
Level 2, 35 Spring St
Melbourne VIC 3000

The Commission will make submissions available to the public on its website, with the exception of any commercially sensitive or confidential information which has been identified as such in the submission.

Please direct any queries about this Draft Report to Michael Cunningham on (03) 9651 0247 (or michael.cunningham@esc.vic.gov.au).

1.6 Plan of report

The remainder of this Draft Report has the following structure:

- Chapter 2 presents an overview of the taxi market in Victoria, obligations on industry participants under the regulatory framework, the taxi licence market, trends in demand for taxi services, trends in customer satisfaction and other aspects of the situation and performance of the industry. The chapter also summarises the key issues raised in the consultation process of this Review,
- Chapter 3 provides a situation summary and identifies the objectives relevant to the Review.
- Chapter 4 sets out approaches to setting price paths for taxis and identifies the Commission's preferred approach. The chapter then examines the adequacy of current fare levels and whether a price adjustment should be made in September

2008, in light of the fare increase in March 2008. The chapter also quantifies the trend rate of productivity improvement.

- Chapter 5 addresses fare structure issues and formulates preliminary conclusions and options
- Chapter 6 discusses issues relevant to surcharges, including time of day surcharges and the proposed premium taxi service surcharge
- Chapter 7 identifies factors relevant to the distribution of income between drivers, operators and depots. The chapter also discusses issues relevant to performance measurement and information gathering.
- Chapter 9 considers affordability and the availability of services to low income and disabled users.
- Chapter 10 provides a discussion of a range of broader issues, including options for the future direction of taxi industry regulatory reform.

2 | VICTORIAN TAXI INDUSTRY

In carrying out its role of making recommendations in relation to taxi fares and other matters in the terms of reference, it is necessary for the Commission to have regard to the conditions of supply and demand in the market for taxi services and the performance of the industry in meeting customer expectations of service quality. This chapter provides information on the supply and demand for taxi services, including relevant background information on the industry participants and the services provided. It also discusses the performance of the Victorian taxi industry in meeting the government's transport policy objectives with respect to the availability and affordability of taxi services to consumers.

2.1 Introduction

The Victorian taxi industry is a regulated industry in which entry is restricted by the requirement for each taxi-cab operator to hold or be assigned a licence (one vehicle per licence). The industry is regulated by the Victorian Taxi Directorate (VTD), which issues licences and enforces compliance with their conditions. VTD is a branch of the Public Transport Division of the Department of Transport.

The industry is divided into four zones: Metropolitan; Outer-suburban, comprising Frankston and Dandenong; Urban Regional, comprising Geelong, Ballarat and Bendigo; and the Country.

Taxi fares are set by the Government, and the metered fare must be charged by the cab.⁵ An exception is made for permanent and contracted services (such as corporate contracts), where operators and drivers can negotiate fares below the metered rate. The fare schedule varies between the regions to account for differences in trip types, demand levels and costs.

Taxi-cabs are defined as a commercial passenger vehicle available on-demand for public hire. They may be hailed, pre-booked or picked up from a taxi stand, and are obliged to pick-up a passenger when hailed or taken from a taxi rank if they are not otherwise engaged⁶. Vehicles operating solely through a pre-booking or ordering system are not included in this definition (these are classified as 'hire cars'). Taxi-cabs are not permitted to operate fixed route services in direct competition with public transport services.

Other aspects of taxi industry regulation include safety and service quality standards, including for vehicle livery; restrictions on the make and maximum age

⁵ This mandatory fare approach is not typical in Australia. In most other jurisdictions where taxi fares are regulated, these are maximum fares, which the taxi operator can discount from. This is relevant to the detailed comparison of taxi fare structures in chapter 4.

⁶ Transport (Taxi-Cabs) Regulations 2005, s.29

of vehicles; vehicle maintenance standards; driver certification and accreditation; amenity requirements such as air-conditioning; as well as driver uniforms.

As at February 2008 there were 4,651 taxis operating in Victoria. Approximately 80% of these were conventional taxis, the remaining 20% comprised the following special types of taxis:

- *Peak service taxis* – or ‘green tops’. These taxis are allowed to operate between the hours of 3pm and 7am, and during specified major events, within the Metropolitan Taxi Zone. Peak service taxis were introduced in January 2003 to service the high demand for late afternoon, evening and early morning taxi services.
- *Wheelchair Accessible Taxis (WATs)* – WATs are specially fitted taxis which can accommodate wheelchairs, and are required to respond to wheelchair passenger bookings. However they are also allowed to carry non-wheelchair passengers if not otherwise booked. WAT operators qualify for a number of subsidies to facilitate the supply of such vehicles.
- *High Occupancy Vehicles (HOVs)* – HOV licences or “maxi-taxi” were first introduced in 1999, with the issuing of 100 licences in 1999 and 2000. These are larger vehicles that are able to carry between 6 and 11 passengers or two occupied wheelchairs. When carrying six or more passengers, or when a larger than standard taxi is required (excluding wheelchair hirings), HOVs have a regulated booking fee that is higher than conventional taxis.
- *Premium taxis* – also known as “silver service” taxis, operate on conventional taxi licences, but are generally fitted to a better standard than conventional taxis and charge a higher booking fee, for example Silver Top depot charges an \$11 surcharge to the conventional fare for hiring premium silver service vehicles⁷.

Table 2.1 presents the regional breakdown of taxi licences by type, and shows that the majority of conventional licences in Victoria are for operating taxis in metropolitan Melbourne. However, there are a relatively higher proportion of WAT licences in country and regional Victoria compared with conventional taxi licences.

Table 2.1 **Summary of Taxi Licences as at Feb 2008**

	<i>Metro & Outer Suburban</i>	<i>Regional Urban</i>	<i>Country</i>	<i>Total</i>
Conventional	3,153	214	411	3,778
WATs & HOVs	256	33	84	373
Peak service	500	0	0	500
Total	3,909	247	495	4,651

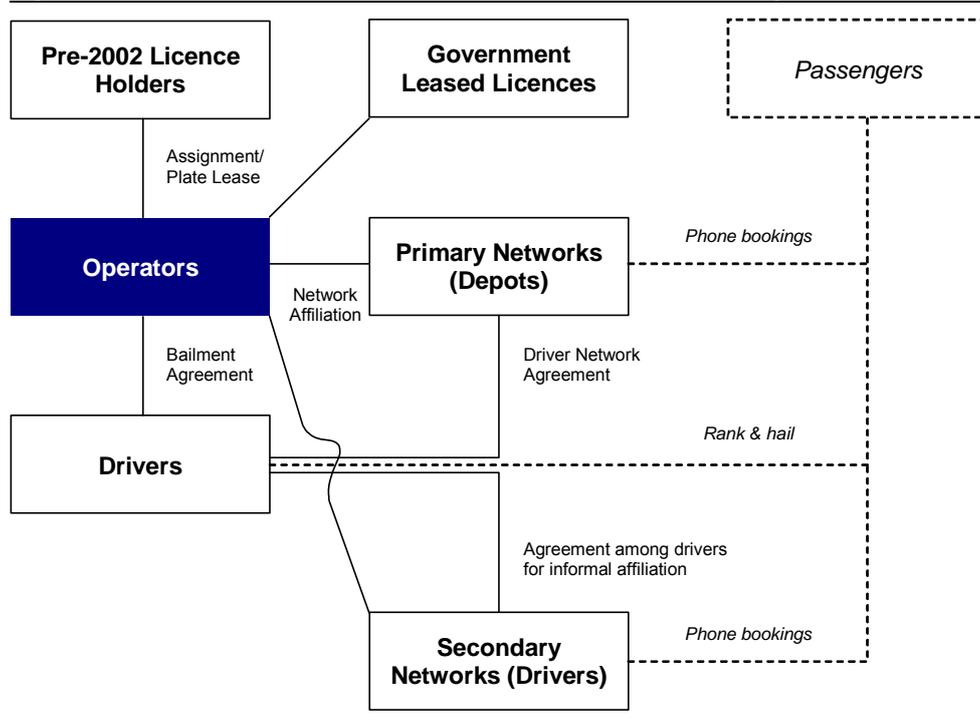
Source: VTD

⁷ Silver Top website 2007

2.2 Industry Participants

Figure 2.1 summarises the key taxi industry participants, which are each discussed below.

Figure 2.1 **Structure of the Victorian Taxi Industry**



2.2.1 Taxi Operators

Taxi operators own and maintain taxi cabs, and operate taxi cab services. Some operators also hold licences for taxi cabs they operate. This is common in country areas, and for some smaller metropolitan operators. Most operators lease taxi cab licences from licence holders (termed 'assignment' of the licence). In the case of 'green top' taxis, the licence is leased from the Government. The use of leased or assigned licences is typical for fleet operators. In the metropolitan area, fleet operators may operate 50-100 taxi-cabs.⁸

Taxi operators may also drive taxis. This is commonly the case for smaller operators. There are approximately 2,600 taxi operators who are also drivers in Victoria⁹, which represents more than half of all taxis in operation.

Each taxi-cab operator must be affiliated with a depot (Network Service Provider) approved by the VTD. This is to ensure the effective functioning of central

⁸ The Commission understands that the largest 220 taxi operators in the metropolitan area account for approximately 1600 taxi-cabs.

⁹ VTD

despatch services, and to provide for driver safety.¹⁰ The operator may also affiliate with a secondary network (discussed in section 2.2.2 below).

The Taxi Industry Accreditation scheme, introduced on 31 December 2007, sets out a range of service standards and safety regulatory obligations that apply to taxi operators. These include financial viability; record keeping and provision of information to third parties such as licence holders; customer service processes and protocols including handling of complaints; taxi cab and driver livery; vehicle standards; regular inspections and maintenance; taxi cab availability for hire; driver, customer and public safety; and driver training and compliance¹¹.

One of the most visible aspects of taxi regulations is the consistent livery standards across all vehicles, as well as the prescribed uniforms that drivers must wear in addition to signs and lamps on top of the cabs. Taxis are prohibited from displaying advertising, for instance on the rear of the car. The purpose of these livery requirements is to present taxis with “a clean, advertising free, professional image”¹².

The age of vehicles that can be used as taxis is restricted. For metropolitan taxi-cabs, vehicles can be no more than 6.5 years of age. Country taxis can be up to 7.5 years, while most Wheelchair Accessible Taxis (WATs) have a maximum age of 10.5 years. WATs operating on metropolitan licences specifically issued for high occupancy vehicles must be new when first licensed and have a maximum age limit of 8.5 years.

Taxis are required to undergo an inspection every 12 months by a licensed tester if they are less than 4 years old, and every 6 months for older cabs (or every 3 months for taxis in the last 6 months of their operating lives).¹³ The VTD also carries out spot checking of vehicles.

All taxis must be fitted with an EFTPOS terminal approved by the VTD. The general objective is to give passengers maximum choice in the payment methods available to them. Currently the only terminal approved for use is Cabcharge’s EFTPOS system. The VTD also has a non-exclusive contract with Cabcharge in relation to MPTP transaction processing¹⁴. This reinforces Cabcharge’s dominance in the provision of in-vehicle electronic processing services for the industry.

Compulsory in-car driver protection measures include emergency warning devices, driver duress alarms and boot lock release mechanisms. In addition, over 90% of

¹⁰ Transport Act s.133

¹¹ VTD (Victorian Taxi Directorate) 2007c, *Taxi Industry Accreditation*, [http://www.taxi.vic.gov.au/doi/doi/elect.nsf/\\$UNIDS+for+Web+Display/3153A348EEE6A61ACA2573B00019DFF6/\\$FILE/Taxi%20industry%20accreditation%20brochure.pdf](http://www.taxi.vic.gov.au/doi/doi/elect.nsf/$UNIDS+for+Web+Display/3153A348EEE6A61ACA2573B00019DFF6/$FILE/Taxi%20industry%20accreditation%20brochure.pdf), accessed 31 December 2007.

¹² Department of Infrastructure 2006, *Response to Working Party Recommendations* (Victorian Country Taxi Industry Review), May, p. 12.

¹³ Country Taxi Review (May 2006), p.54

¹⁴ The VTD has a specific interest in ensuring that transactions associated with the Multi Purpose Taxi Program (MPTP) can be processed. The MPTP is a government subsidy to cover part of the costs of travel for those with severe disabilities (judged against eligibility requirements).

Victoria's taxi fleet have in-car security cameras¹⁵. Shortly before the release of this Report the Minister also announced the requirement of taxi-cabs to be fitted with safety screens.

As a condition of the taxi licence, a taxi cab may be hired by the public on demand and must be used so as to maintain regular and continuous services. This is interpreted by VTD to mean that a sufficient number of taxi-cabs should be available to meet public demand at any time, not that taxi-cabs must be operated on a 24 hour basis¹⁶.

In addition to this general obligation (which is not specific as to how it applies to individual taxi operators), there is an obligation under the new industry accreditation arrangements, that each taxi-cab be available for hire for 90% of peak demand times.¹⁷

2.2.2 Network Service Providers

Taxi operators are required to be affiliated with a network service provider accredited by the VTD. This is to provide a centralised booking and dispatch service for customers and a safer work environment for drivers. Metropolitan, outer suburban and urban network service providers use a Geographic Positioning System (GPS) to monitor the location and movement of each cab while it is in service.¹⁸

The requirements for accreditation of primary networks are set out in the accreditation regulations. To date, a requirement for approval has been that depots demonstrate that approval would be in the public interest. Taxi operators must enter a commercial agreement with an approved depot, paying them fees for the services they provide¹⁹. These fees are not regulated.

A total of 107 taxi network/depots operate in Victoria, of which six are in the metropolitan zone, two are in the outer suburban zone, and 99 are located in country Victoria. The main depots in metropolitan Melbourne are Silver Top Taxi Service, owned by the Gange Corporation, and Black Cabs Combined, owned by Cabcharge. The remaining depots in the metropolitan area, with the exception of West Suburban Taxis, are all affiliated with Black Cabs Combined, and are effectively a single entity. The two major depots account for over 90% of the greater Melbourne taxi market. Their dominant position in the market has followed a trend for aggregation and increasing concentration of metropolitan depots, with depot numbers decreasing markedly over the last decade.

¹⁵ VTD (Victorian Taxi Directorate) 2007a, Taxi Industry Background – April 2007, unpublished data provided to the Commission.

¹⁶ KPMG, p.37

¹⁷ Defined as the periods from 7.30am to 9.00 am Monday to Friday; 3.00pm to 4.30pm Monday to Friday; midnight Friday to 6am Saturday; and midnight Saturday to 6am Sunday.

¹⁸ DOI
<http://www.doi.vic.gov.au/doi/internet/vehicles.nsf/AllDocs/712BF0EEC0458993CA256F320020A3FB?OpenDocument#depots>. Accessed 11 April 2008.

¹⁹ ESC 2005, p.24

Under the new Taxi Industry Accreditation scheme, network service providers are required to advise customers who book a taxi cab of known delays and must not discriminate between customers in the offering of bookings or allocation of cabs (unless it is necessary to comply with other business and service standards). They must not offer conventional taxi jobs to WATs when a local booking for a disabled customer has not been attended to after five minutes. The new business standards mandate a system of records management appropriate for the purposes of inspection and auditing and networks are also required to operate a complaint management system.

There are a number of secondary networks, which are not yet accredited by the VTD. Secondary networks also provide booking and despatch services, but taxi users book directly with a preferred driver, who may use the secondary network to offer the job to another secondary network member. It is understood that there are six highly developed secondary networks operating in the greater metropolitan area each with a fleet size of around 50. All six secondary networks are incorporated (under the *Associations Incorporation Act 1981 (Vic.)*)²⁰.

2.2.3 Drivers

Taxi drivers must obtain a driver's certificate from the VTD prior to driving a taxi. New drivers within the metropolitan zone are required to undertake a 115 hour course in taxi driving prior to being accredited, and WAT drivers are also required to complete a 40 hour course specifically for WAT operations. Some new driver training initiatives have been recently announced, under which training requirements increased from 90 hours to 115 hours, and all new taxi drivers will be tested on knowledge of Melbourne's landmarks. Training will include stronger literacy requirements and conflict resolution training. Overall, taxi driving is a relatively liquid labour market in which drivers have a significant degree of flexibility in relation to periods worked.

Drivers must also enter into a depot affiliation agreement – although in principle they can be affiliated with more than one depot. It is also generally a condition of engagement in the industry that drivers enter into a network licence agreement, which formalises certain regulatory powers networks have over drivers.

There are approximately 24,000 driver's certificates on issue and around 13,000 active taxi drivers in Victoria, approximately 10,000 of which drive metropolitan taxis²¹. The Commission understands that, excluding approximately 2,600 taxi operators who are also drivers, there are approximately 8,200 'active' taxi drivers who have driven for a period of more than one month in the last 12 months.

Almost all drivers who are not licence holders or operators are engaged through Bailment Agreements. These agreements specifically exclude any relationship of employment, agency, partnership or franchise²². Rather, bailee drivers are more akin to sub-contractors. Bailment agreements are not regulated in Victoria and

²⁰ Allen Consulting Group. 2007, p.85. Note that because all taxi operators must be affiliated with an accredited network, taxi-cabs that are part of a secondary network must also be affiliated with a primary network. See section 7.2.7 for further discussion.

²¹ DOI 2007

²² Victorian Taxi Association (VTA) 2002a, "Taxi Cab Bailment Agreement", p. 17.

drivers are not entitled to the usual benefits of employees such as superannuation, annual, sick or long service leave, and so forth.

The bailment agreement is a commercial contract between the taxi operator (bailor) and the taxi driver (bailee), under which, the fare revenue collected by drivers is shared with the taxi operator. The bailment fees are paid by the bailee to the bailor at the end of each shift and is the consideration to the bailor for use of the taxi cab. It is referred to as the "rent". The method of calculating the rent is set by negotiation between the bailor and the bailee.

Under a standard bailment agreement there are several options for setting the rent. It can be based on revenue, kilometres travelled, flat rate per day, or any other criteria or combination. By far, the most common in Victoria is a 50/50 sharing of taxi income²³. A survey of drivers by the VTD indicated that 90% of bailee drivers in Victoria are under this option. Similarly the PwC surveys of taxi operators and drivers indicated that around 95% of agreements are on this basis. The alternative arrangement used in the industry is for the driver to buy a shift through a fixed pay-in (and for the driver to receive all of the revenue for that shift). However in the PwC survey, 90% of drivers indicated that they were not offered a choice of payment arrangements when they entered into their bailment arrangements.

Although bailment agreements are regarded as mandatory in the industry, a recent survey of taxi drivers by VTD found only 59% of respondents had signed a bailment agreement.²⁴ In the PwC survey of taxi drivers, 37% indicated they were full time bailees, and 63% indicated they were casual bailees.

There are no official statistics relating to driver income, however, the PwC survey findings indicate that the average driver income is approximately \$13.20 per hour. Drivers typically cover additional expenses such as superannuation and sick leave²⁵.

In July 2007, the Victorian government introduced a new driver accreditation scheme to replace the previous certification arrangements. For drivers seeking to operate in the metropolitan zone, the new regime sets out a range of steps to be successfully completed including:

- a national police record check
- an independent driving assessment for those applicants who have held their full drivers licence for less than a year
- a complete medical assessment

²³ The bailment agreement specifically precludes tips from being part of the rent (they are retained by the driver). The bailment agreement also precludes Concession Charges being part of the rent. Concession Charges are tolls or airport parking charges - which are paid by the driver (who have their own e-tags) and directly recompensed by the passenger. It also excludes the Late Night Surcharge in accordance with the fare schedule issued by the VTD and s.144(2)(da) of the Transport Act. Additionally, taxi drivers are also required as part of the VTA's standard bailment agreement to pay a bond to the bailor. While ordinarily this bond would be repaid to the bailee upon conclusion of the contractual relationship, the agreement spells out the conditions under which this bond might be retained in part or in full for the bailor – specifically in the context of accidents and other general vehicle repairs where the bailee is found to be at fault.

²⁴ Driver survey, p.21

²⁵ ESC 2005, p.24

- an English literacy assessment, and
- a course in taxi driving with a registered training organisation²⁶.

Accreditation must be renewed every year or every three years depending on individual circumstances.

The regulations require that drivers:

- must not refuse a hire, except under limited circumstances
- may only multiple-hire with the consent of other passengers, and
- cannot ask for any fare other than the metered fare for the journey.

2.2.4 Licences and licence holders

Licences are held by a person who can either operate a taxi on that licence or can assign the right to operate a taxi on that licence to another person (called the 'operator')²⁷

The right to operate a taxi is based on the issuance of a licence by the VTD. Successive reforms have resulted in two licence structures:

- All licences issued prior to May 2002 are perpetual and fully transferable to third parties. They can either be sold or assigned (leased) to third parties. Since 2006, this has been through the Bendigo Stock Exchange (**BSX**) taxi cab licence transfer and assignment system. Metropolitan taxi licences and assignments must be traded in accordance with the BSX Taxi Market System²⁸. Licensed brokers must carry out all transactions through the BSX system.
- Licences issued after May 2002 are not transferable or assignable. This includes all of the peak service (Green Top) licences issued from 2003 to 2008 and some WAT licences. An annual licence operation fee applies, which varies depending on the licence type and location.

Table 2.2 summarises the current structure of taxi cab licences in Victoria.

²⁶ VTD (Victorian Taxi Directorate) 2007b, *Metropolitan taxi and hire car Driver Accreditation*, <http://www.taxi.vic.gov.au/doi/internet/vehicles.nsf/AllDocs/FEFCF82BA0CAAEEECA256F3200205E90?OpenDocumentm>, accessed 31 October 2007.

²⁷ VTA January 2008: Submission on the Taxi Fare Review 2007-08 Issues Paper.

²⁸ ATIA 2006, p.12

Table 2.2 **Structure of Victorian taxi cab licences**

	Pre-2002 licences	Post-2002 licences
Number of licences issued (as at April 2008)	≈4033	≈618
Type of licence	<ul style="list-style-type: none"> • Conventional • WAT • HOV 	<ul style="list-style-type: none"> • Conventional (regional) • WAT • Peak service (at least 50% converting to conventional on sixth anniversary of issue)
Method of 'ownership'	Fully transferable to a third party via: <ul style="list-style-type: none"> • Sale • Assignment 	Leased from Government for an annual fee
Cost/value of licence (as at April 2008)	<ul style="list-style-type: none"> • \$478,333 sale / transfer (April average) • \$2,221 per month assignment fee (April average) 	<ul style="list-style-type: none"> • \$65,000^a one-off (WAT) • \$5,000 pa, CPI indexed (peak service)

^a Issued to existing WAT assignee operators, and discounted \$5,000 for each year that the operator had operated on assignment.

Data Sources: DOI 2007. BSX website accessed 14 April 2008

Approximately 4,000 of the 4651 licences issued (as at February 2008) are assignable. Out of these approximately two thirds have been assigned, with the remainder being held by taxi operators²⁹. Assignment of licences may be to an operator/driver or to specialist taxi fleet managers. The latter mainly occurs in the metropolitan area. The majority of metropolitan licence holders do not operate the vehicle attached to their licence, but assign (i.e. lease) it to a third party. The licence holder receives income from assignment rates (currently around five to six per cent of the market value of a licence per annum) as well as any capital gains from growth in the value of the licence³⁰. In country areas it is more typical for a licence holder to also be a taxi operator.

Licences are assigned for between 12 months and three years. Section 150(4A) of the Transport Act prevents assignment for a period of more than three years. Approximately 1,320³¹ licences are reassigned each year, which indicates the average term of an assignment contract is approximately two years. Assignment fees and conditions are not regulated. Monthly assignment fees for a newly assigned metropolitan taxi licence averaged \$2,221 in April 2008 (i.e. \$26,650 per annum). This is 5.6% of the average licence value for the same month of around \$478,333³². Assignment fees as a percentage of licence value have decreased from 7.1% in June 2002. This will partly reflect decreased financing costs given

²⁹ VTD website 2007: www.taxi.vic.gov.au

³⁰ ESC 2005, p.22

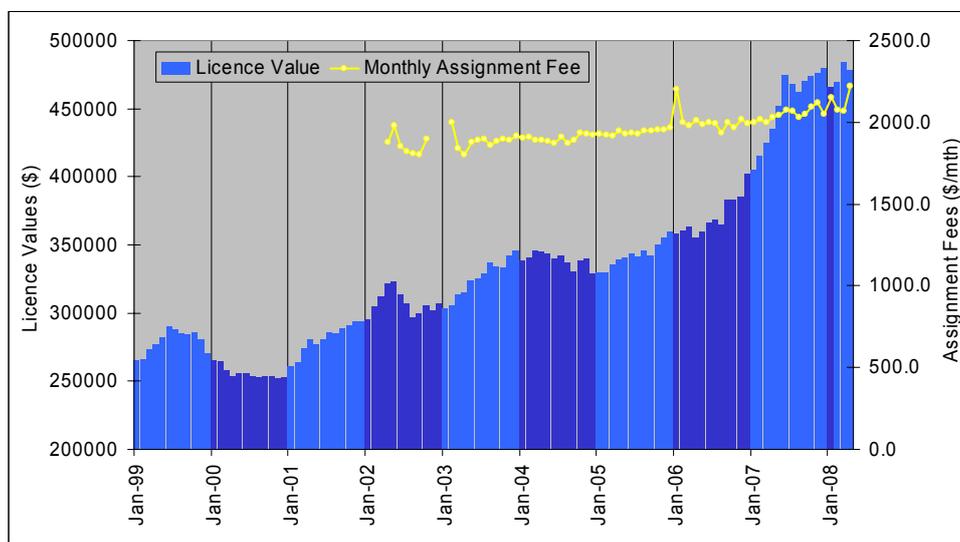
³¹ BSX pers.comm, 14 April 2008

³² BSX Taxi Market Website 2007

interest rate movements over the period. However it also suggests that an increasing proportion of taxi licence values are based on expected capital gains.

Approximately 120-130 licences are transferred each year³³. Figure 2.2 shows the average prices of metropolitan taxi licences in Melbourne from 1999 to 2008, as well as licence assignment fees over part of this period. The price of a licence has increased from \$265,000 in January 1999 to approximately \$466,000 in January 2008. This is an average increase of 7.3% per annum. In comparison the CPI increased by 3.5% per annum over the same period. The most recent data indicates that taxi licence values were \$478,333 in April 2008.³⁴

Figure 2.2 Licence values & monthly assignment fees



Data Source: VTD

The values of non-metropolitan licences are more difficult to analyse. Trades in such licences do not occur on the BSX Taxi Market, and do not occur as frequently as is the case for metropolitan licences. Furthermore, licence restrictions on the areas in which they can operate mean they cannot be readily compared³⁵.

Issuing of licences

Licences have value by virtue of their scarcity. Table 2.3 below indicates the trend in metropolitan zone licence numbers since 1953. The number of metropolitan conventional taxi licences has been virtually unchanged since the mid-1970's, with the exception of the issue of 150 additional conventional licences in 1986-87, and the introduction over the last decade of WAT, HOV and peak period licences.

Over the five years from 2003 to February 2008, 500 peak service licences were issued, in line with the Government's intentions as announced in 2002. At least half

³³ BSX pers.comm, 14 April 2008

³⁴ BSX Taxi Market Website 2007 (accessed 14 November 2007)

³⁵ ESC 2005, p.23

of those licences convert to full 24 hour licences on the sixth anniversary of the issue date.

In summary, metropolitan licences remain tightly constrained, although the Government also stated in 2002 that 'industry performance monitoring will determine whether there is a need to increase the number of licences'. As discussed below, hire car licences have not been constrained.

Table 2.3 Metropolitan zone licences issued 1986-Feb 2008

<i>Year</i>	<i>Licences Issued</i>	<i>Licence Type</i>	<i>Licence Fee</i>
Pre-1986	2,881 + 15	Conventional + WAT	Nil
1986/87	150	Conventional	\$50,000 (one off)
1989	7	Conventional	Nil (reclass. from country zone)
1990/91	50	WAT	\$1
1994	1	Conventional	Transferred from country zone
1999/2000	100	HOV	\$65,000 (one off)
2002	69	WAT	\$65,000 ^a (one off)
2002-Feb 2008	500	Peak Service	\$5,000 ^b (annual)

^a These licences were issued to existing WAT assignee-operators. The rate paid was discounted \$5,000 for each year that the operator had operated on assignment.

^b The annual fee is indexed against the CPI, with the fee adjusted annually. As such, the fee payable in 2007 was \$5,578. This figure excludes GST.

Sources: Pre-1986 data from Foletta, B. 1986, Report of the Taxi Inquiry – Melbourne and Metropolitan Area, Ministry of Transport, Melbourne, pp. 10, 71-72. All other data supplied by the Victorian Taxi Directorate.

Regional licence issue is, in principle, ongoing and based on local demand. Following the National Competition Review in 1999, up to 11 taxi licences were issued in regional Victoria as of December 2006³⁶.

Trends in licence supply per head of population

Table 2.4 presents information on the long-term trend in metropolitan taxi licence numbers per head of population. It indicates that over the period taxi licences have become scarcer relative to Melbourne's growing population. The restriction in the supply of licences is more pronounced when consideration is given to the underlying increase in demand for taxi services associated with the ageing of the population over the period. This trend in taxi licences in proportion to the population explains the increasing scarcity value of taxi licences, as reflected in their market values.

³⁶ VTD unpublished data provided to the Commission 2007

Table 2.4 **Metropolitan taxi licences per 1,000 persons**

Year	No. Conventional licences	Conventional licences per 1000 persons	No. WAT & HOV licences	WAT & HOV licences - % of fleet	Total licences per 1000 persons
1953	1,639	1.18			1.18
1961	2,201	1.11			1.11
1971	2,723	1.08			1.08
1981	2,878	1.03			1.03
1986	2,953	1.00	15	0.5	1.00
1991	3,038	0.96	65	2.1	0.98
1996	3,039	0.93	65	2.1	0.95
2001	3,039	0.88	165	5.1	0.92
2006	3,039-3439 ^a	0.82	234	6.4	0.88-0.99 ^b

^a includes 400 peak service licences ^b upper figure is if peak service licences included.

Source: VTD, ABS

2.3 Demand for taxi services

Taxis operate in the broader market for transport services and compete with other modes of passenger transport such as public transport, private vehicles and other commercial passenger vehicles such as hire cars. However, to the extent that taxis are used for part of a longer journey, they may be complements to public transport.

In the Issues Paper the Commission highlighted the uncertainty over the number of taxi trips annually in Victoria, with estimates of total taxi trips in Victoria ranging from 27 million per annum by the ATIA³⁷ to 32 million per annum by the VTD³⁸, and 35 million per annum by DOI.³⁹ The survey of taxi operators and drivers undertaken by PwC on behalf of the Commission as part of this Review yielded an estimate of 6,923 trips per annum for the median taxi-cab. With 4,651 taxis at the time the survey was undertaken, this equates to 32.2 million trips in 2007. While this estimate is subject to sampling error, it is the best of the available evidence, and consistent with the other estimates.

The PwC survey also found that the average trip distance is 8.4 kilometres. The average taxi fare is estimated to be just under \$19 per trip (see Table 5.2), implying that the entire taxi cab fleet generates over \$600m per annum.

2.3.1 Trends in demand

Data for long-term trends in demand are limited. VTA's submission to the 1999 NCP review of Victorian taxi regulation compiled the historical data available at that time.

³⁷ ATIA 'State & Territory Statistics as at December 2006'

³⁸ VTD unpublished information provided to the Commission 2007

³⁹ DOI website

Table 2.5 **Taxi use data – Greater Melbourne – 1978 to 2007**

	<i>Taxi licences</i>	<i>Total trips (m)</i>	<i>Avg. trips per cab</i>	<i>Average trip length (km)</i>	<i>Engaged to total km (%)</i>	<i>Avg. paid km per cab</i>	<i>Total paid km (m)</i>
1978	2,983	21.2	7,107	6.3	48	44,744	134
1986	3,001	20.9	6,964	7.6	51	52,926	159
1998	3,247	22.4	6,899	10.0	58	68,990	224
2007	3,909	27.0	6,915	8.3	51	57,197	224
<i>% increase</i>							
- 1978 to 1986	0.1	-0.2	-0.3	2.4	0.8	2.1	2.2
- 1986 to 1998	0.7	0.6	-0.1	2.3	1.1	2.2	2.9
- 1998 to 2007	2.1	2.1	0.0	-2.0	-1.4	-2.1	0.0

Sources: VTA (1999), p.6; PwC (February 2008), p.13

In Table 2.5 above the historical data for the greater Melbourne area⁴⁰ (including the Outer Suburban zone) is combined with PwC survey data to produce a range of demand trends (for number of trips, trip length and paid kilometres – in total and per cab).

The number of taxi trips in Melbourne over the last three decades has largely followed the number of taxi-cabs in operation. Table 2.5 shows that there has been considerable stability in the number of trips per cab, around 7,000 per annum. From 1978 to 1998 the number of licences was relatively static, and the number of taxi trips was also static. Since 1998, the ‘green top’ licence release program has been associated with an increase in taxi trips in Melbourne from 22 m in 1998 to 27 m in 2007.

Between 1978 and 1998 the average distance of taxi trips increased considerably, perhaps due to spreading of the urban area and greater use of air travel. As a result the total engaged kilometres for the whole fleet increased by 2-3% annually. For the typical cab, the average annual increase in paid kilometres was around 2%. Since 1998 the average trip distance has been declining. Consequently the total engaged kilometres in Melbourne remain static, even though the number of trips was increasing at around 2% per year. Over this latter period engaged kilometres per cab decreased by around 2% per annum, due to the increase in taxi licences.

The ratio of engaged kilometres to total kilometres has followed the same trend as average trip distance. Between 1978 and 1998 the ratio of engaged to total kilometres increased from 48% to 58%, but from 1998 to 2007 the average ratio decreased to 51%

To provide additional information, PwC’s 2004 and 2007 surveys can be used to construct an output index for taxi cabs. The two surveys contain revenue estimates for the average taxi cab in 2000, 2004 and 2007. These can be deflated by an index of taxi fares to obtain an index of “outputs” per taxi (which is implicitly a weighted average of trips and kilometres, with the weights being the revenue shares of the flag-fall charge and the per kilometre charge). On a per cab basis this output index decreased at an average rate of 1.7% per year between 2000 and 2007. When multiplied by the number of taxi licences, the implied level of output for the industry as a whole was estimated to have increased by 0.8% per annum between 2000 and 2007.

Journey to work data

Another source of data for taxi usage is the ABS Census data for journeys to work. A significant shortcoming of using this data is that journeys to work are only one relatively minor purpose for which taxis are used. However, it is convenient for directly comparing trends in public transport and taxi use. ABS data for taxi and public transport journeys to work for three capital cities is shown in Table 2.6.

⁴⁰ The VTA submission also reported data for 1983 and 1987. These years have been excluded from Table 2.4 because the data for 1986 is a sufficient indicator for that period and because: (i) for 1987, taxi licence numbers were not provided for the greater metropolitan area, and (ii) the 1983 data appears to be anomalous compared to all of the other years presented in the VTA submission.

The journey to work data suggests that the use of taxis for this purpose declined from 4,105 persons per day in 1996, to 3,771 in 2001 and increased to 3,889 in 2006. This represents a decline of 1.6% per annum between 1996 and 2001, and an increase by 0.6% per annum from 2001 to 2006. Overall, there was a slight decline of 0.5% per annum over the ten year period.

The mode share of taxis in overall journeys to work in Melbourne declined from 0.37% of all journeys to work in 1996 to 0.29% in 2006. The mode share of other forms of public transport increased over the same period from 8.8% to 10.2%. This pattern is reasonably similar between the three capital cities shown in Table 2.6.

Table 2.6 Journeys to Work (per day & mode shares)

	<i>Taxis</i>			<i>Public Transport^a</i>		
	<i>1996</i>	<i>2001</i>	<i>2006</i>	<i>1996</i>	<i>2001</i>	<i>2006</i>
No. persons/day						
Melbourne	4,105	3,771	3,889	98,644	114,123	137,282
Sydney	7,548	6,638	6,395	211,634	236,166	251,912
Brisbane	2,702	2,193	2,280	52,781	57,765	75,484
Mode shares (%)						
Melbourne	0.37	0.31	0.29	8.8	9.3	10.2
Sydney	0.58	0.47	0.42	16.1	16.7	16.7
Brisbane	0.51	0.37	0.33	10.0	9.8	11.0

^a Includes buses, trams, trains and ferries.

Source: ABS Census (data is for census day)

The ABS data suggests there may have been a relative shift in taxi use away from certain purposes such as journeys to work, and by implication toward other uses such as social events.

2.3.2 Sources and patterns of demand

There are two distinct parts of the taxi market⁴¹:

- phone bookings, and
- taxis hired in taxi ranks or hailed in the street.

Recent market research carried out by DOI suggests that phone bookings may comprise up to 60% of all taxi engagements,⁴² with 20-25% are hailed in the street, and 15-20% engaged at taxi ranks. However, in this Review the Commission has

⁴¹ See R. Darbera 'When the Regulator Acknowledges the Existence of Two Distinct Markets for Taxi Services', in OECD (2007) *(De)Regulation of the Taxi Industry*

⁴² Wallis Consulting Group (2006), 'Taxi Customer Satisfaction Monitoring Survey: Quarterly Report Oct-Dec 2006', prepared for Information Services, Public Transport Division, Department of Infrastructure, p.15

also considered the PwC survey of taxi drivers and operators, which indicated that approximately 50% of taxi trips are pre-booked.⁴³ In country areas phone bookings account for over 90% of all taxi engagements.⁴⁴

The demand for taxi services can be categorised into the following three broad categories:

- *Corporate demand.* VTD estimates that this market segment accounts for around 30% of taxi revenue. Airport trips are likely to account for a significant component.
- *Private or social demand.* This incorporates leisure or commuting journeys, and represents over half of total revenue according to VTD – and almost all trips in country areas⁴⁵.
- *Tourism demand.* This sector accounts for approximately 17% of revenue.

The taxi industry *Customer Satisfaction Monitor* surveys, carried out from June 2004 to December 2007, contain information about taxi users in Victoria for private or social demand. A summary break down of information for the last taxi trip taken by respondents by customer age group and trip purpose is shown in Table 2.7. It shows that trip purposes tend to differ for the different cohorts.

Table 2.7 **Purpose of last taxi trip by age of user (%)**

	<i>Under 25 years</i>	<i>25-34 years</i>	<i>35-44 years</i>	<i>45-54 years</i>	<i>55-64 years</i>	<i>65 years or older</i>	<i>Total</i>
Work	1.0	4.0	5.1	4.1	2.2	0.4	16.8
Social event	13.1	9.7	7.9	5.8	3.2	3.7	43.3
Personal Appointment	0.7	1.0	1.5	2.0	2.5	7.5	15.1
Airport	0.7	2.2	3.9	4.2	3.3	2.1	16.3
Other	1.1	1.0	1.4	1.2	1.4	2.4	8.5
Total	16.7	17.9	19.6	17.2	12.6	16.0	100.0

Data source: DOI Taxi user customer satisfaction survey (data file provided by DOI)

Based on the results of the June 2004 survey, it was found that the main purposes for using taxis were to get to or home from a social event (43%), for work related activities (17%), to get to or from a personal appointment (15%); and to get to or home from the airport (16%).

In country areas social events and appointments together comprise around 86% of journeys, with work journeys (6%) and getting to other transport (8%) accounting for the remainder.⁴⁶

⁴³ The average across all driver and operator respondents indicated 51% of all jobs were pre-booked. This is consistent with the 2002 National Taxi Users Survey which found that in Victoria, 49% of taxis were booked, 27% were hired from a rank, and 24% were hailed in the street.

⁴⁴ Booz Allen (2006) p.14

⁴⁵ Booz Allen (2006) p.13

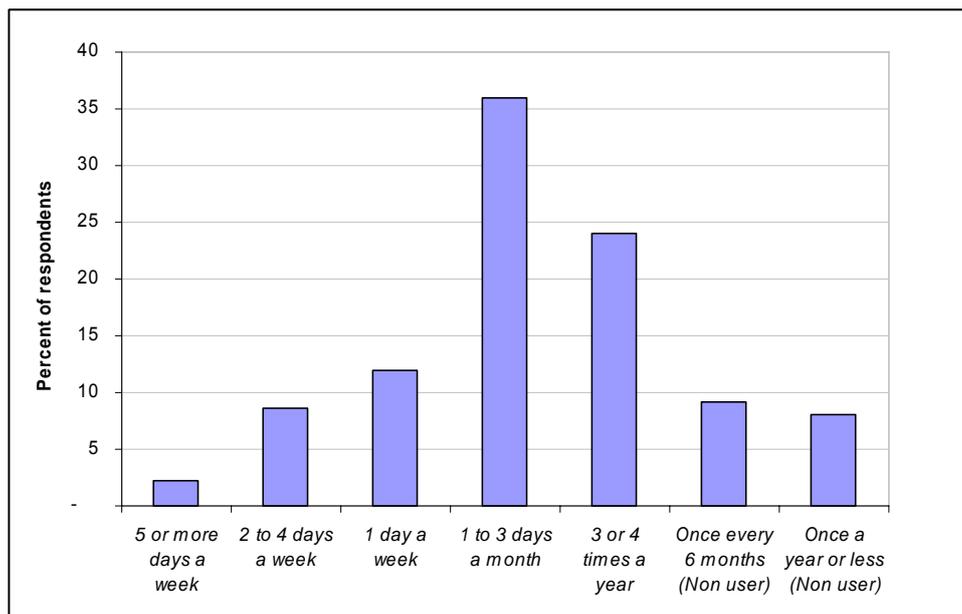
Frequency of use

Most customers only use cabs infrequently. Figure 2.3 shows some summary findings from the Customer Satisfaction Monitoring Survey of taxi users.

- Approximately 11% of respondents used taxis more than one day per week. This group accounted for over 50% of all taxi trips.
- Similarly, 12% used taxis one day per week.
- In total therefore, 23% of respondents used a taxi at least once per week. These users accounted for almost 75% of trips.
- The most common frequencies of taxi usage were '1 to 3 days a month' (36% of respondents) and '3 to 4 times a year' (24% of respondents).
- The remaining 19% of respondents used a cab either 'once every 6 months' or 'once a year or less'.

The monitoring surveys also provide some information on non-users. Based on information presented in the monitoring reports, the Commission has estimated that of those contacted who answered some questions, 40-45% were non-users of taxis.

Figure 2.3 Frequency of taxi use



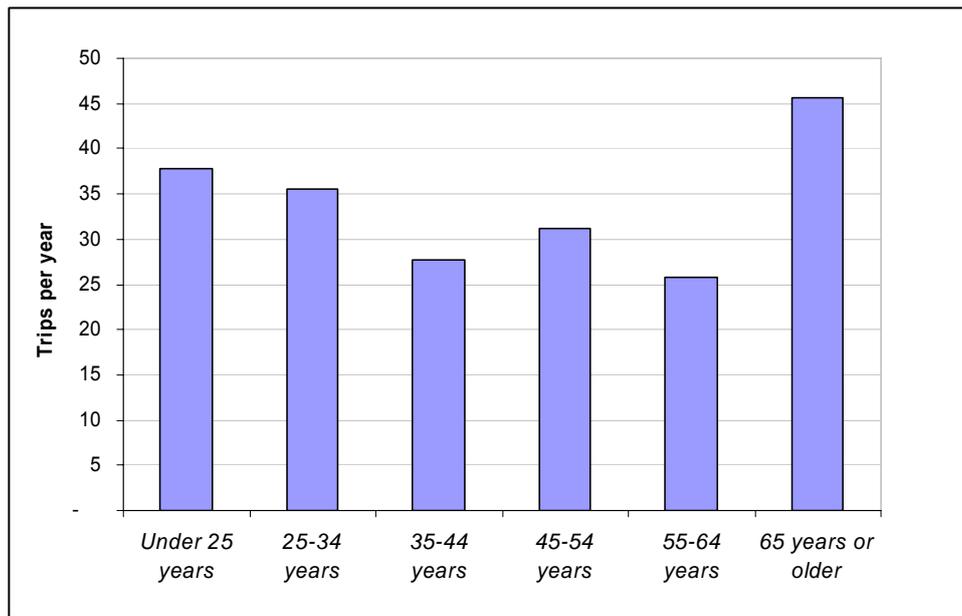
1. Data source: DOI Taxi Customer Satisfaction Monitor

⁴⁶ Booz Allen (2006) p.14

Using the same data by age group, an indicative estimate of the number of trips per year can be derived for each age group – shown in Figure 2.4. These estimates have significant shortcomings because, firstly, the questions relating to use “2 to 4 days a week” etc are ambiguous, since the use of a cab on one day might involve a return trip. Second, the responses on trip frequency appear overstated, since the overall estimated number of taxi trips in Melbourne per year (i.e. 27m), together with the average number of passengers per trip (approximately 1.6), implies that the average adult may take approximately 20 taxi trips per year, rather than over 30 as suggested by the survey responses. This difference may be explained by taking into account the 40-45% of householders who do not use taxis.

The estimates show that people under 35 years of age are relatively frequent taxi users: averaging 35-40 times per year. People between 35 and 65 years are the least frequent users: around 25-30 times per year. People over 65 are the most frequent users: averaging over 45 times per year. Compared to all of the other age groups combined, people over 65 years of age have a 44% higher propensity to make taxi trips. This observation is important when considering the implications of the aging of the population in future taxi demand trends.

Figure 2.4 **Indicative frequency of use by age group^a**



^a Assumptions: a response “5 or more days a week” = 250 trips per year; “2 to 4 days a week” = 150 trips/yr; “1 day a week” = 50 trips/yr; “1 to 3 days a month” = 24 trips/yr; “3 or 4 times a year” = 3 trips/yr; “Once every 6 months” = 2 trips/yr; “Once a year or less” = 1 trip/yr.

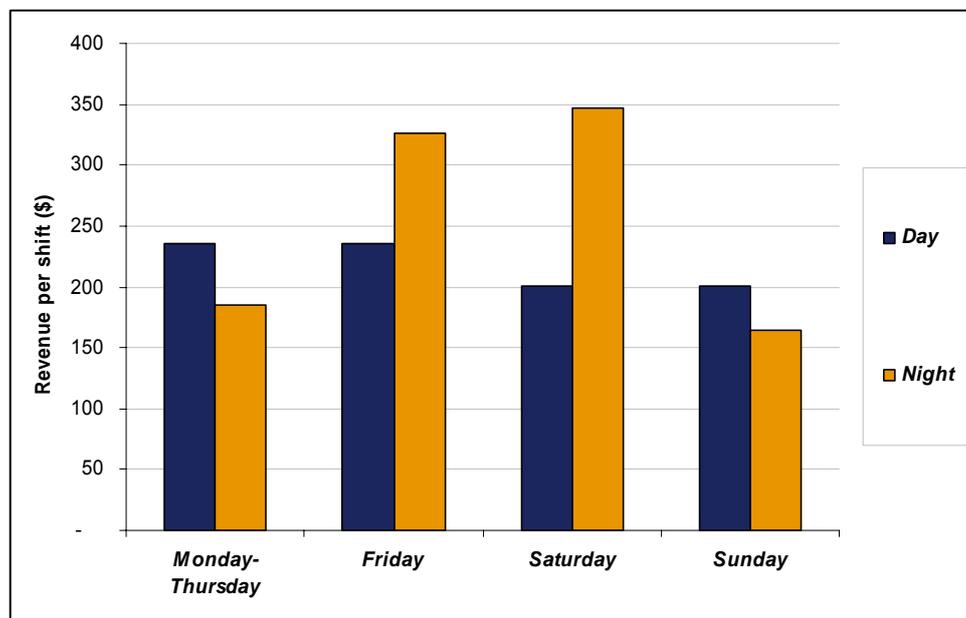
2. *Data source:* DOI Taxi Customer Satisfaction Monitor

Time-of-use profile

The pattern of demand over a typical week is indicated by the average revenue per shift and is shown in Figure 2.5. The figure indicates that the greatest demand for taxis arises on Friday and Saturday nights, followed by weekdays during the day. Monday to Thursday night and Sunday night are off peak periods. Note that “Green

Top” taxis operate during the peak periods on Fridays and Saturdays, but on all other days of the week are largely operating during the least busy shift.

Figure 2.5 Median Taxi Fare Revenue per Shift (\$)



3. Data source: PwC driver & operator surveys

2.3.3 Disadvantaged users

Taxis are an important mode of transport for specific community groups. For example, the elderly and people with disabilities often rely on taxis. It is estimated that 19% of taxi users are pensioners or retirees. Over 20% of these use a taxi more than once a week.

Approximately 10% of taxi users are estimated to be members of the Multi-Purpose Taxi Program (MPTP) – a subsidy scheme for people with a permanent or severe disability who must rely on taxis. There are approximately 178,000 MPTP members, 80% of whom are over 60 years of age. These users accounted for 4.6 million trips in 2005-06, or approximately 15% of all taxi trips. In its submission to this Review, DHS states that these users account for approximately 24% of taxi industry revenue.⁴⁷

Among the MPTP members are approximately 16,000 people who use wheelchairs, representing around 10% of MPTP membership, and a similar proportion of MPTP trips. Wheelchair users account for approximately 1.5% of all taxi trips in Victoria.

⁴⁷ This figure was reported in the Country Taxi Review, and may refer only to country areas

2.4 Competition from hire cars & other transport modes

Competition from hire cars, public transport and private motoring are often cited as key factors that impact on taxi demand, including:

- a long term structural shift from public transport (buses and taxis) to private car use, with a growing proportion of households shifting from single to multi-car status. Australian Bureau of Statistics (**ABS**) census data for Victoria indicates that registered motor vehicles per 1,000 persons increased from 568 to 590 from 2002 to 2006⁴⁸
- growing competition from hire cars
- competition from rental cars with competitive all-day rental rates, and
- competition from mini-buses and courtesy vehicles.

Reforms in the hire car industry have allowed more entrants into the industry and increased the range of vehicles which are allowed to be operated as hire cars.

There are currently 840 hire car licences in Victoria, 770 of which are based in Melbourne. Hire cars are modern luxury sedans or stretch limousines.⁴⁹ The number of hire car licences is not restricted. A one-off fee of \$60,500 (including GST) is payable for the issue of a new hire car licence to operate in the Melbourne metropolitan area. Table 2.8 shows the relative increase in the number of hire care licences.

A taxi-cab is defined⁵⁰ as a commercial passenger vehicle which is used for hiring by the public on demand, and which operates by being hailed or hired from a taxi stand or has been previously booked or ordered, but does not include a vehicle which operates solely by being booked or ordered.

A hire car can only be used for pre-booked services, where the booking is made from the place of business of the owner. It cannot be engaged by hailing and is not permitted to use ranks. Hire cars are not permitted to charge a metered fare. The fare for each journey must be negotiated when the booking is made. Also, there cannot be a separate fare for individual passengers when there is more than one passenger.

⁴⁸ ABS Census 2006

⁴⁹ Not including Restricted Hire Vehicles and Special Purpose Vehicles. Restricted Hire Vehicles are similar to hire cars except that limited vehicle types qualify for this licence, such as vintage cars, off-road or tour vehicles. There are currently 518 restricted hire vehicle licences in Victoria. Special purpose vehicles are similar to hire cars except that they are licensed for specific purposes such as weddings or tours. There are currently 1,028 of these licences operating in Victoria

⁵⁰ Section 86 of the *Transport Act 1983*

Table 2.8 **Melbourne taxi and hire car licences**

	<i>Metro. & Outer Suburban taxi licences</i>	<i>Metropolitan Hire Cars</i>	<i>Total</i>	<i>Hire cars (% of total)</i>
1961	2,232	12	2,244	0.5
1970	2,705	16	2,721	0.6
1980	2,985	46	3,031	1.5
1985	2,987	78	3,065	2.5
1995	3,205	409	3,614	11.3
1998	3,205	442	3,647	12.1
2001	3,305	459	3,764	12.2
2005	3,687	580	4,267	13.6
2007	3,909	770	4,679	16.5

Source: VTD website 2007

Competition also exists with other forms of public transport in Melbourne and Victoria. There were approximately 27 million taxi trips in 2007 in Melbourne, which compares to 146 million passenger journeys by train, 130 passenger journeys by tram and 94 million bus passenger journeys in 2005-06.⁵¹ ABS Census data for Journey to Work in Melbourne shows that between 2001 and 2006, trains, trams buses and ferries increased their combined share⁵² from 9.3% to 10.2%. Over the same period the share of taxis decreased from 0.31% to 0.29%.

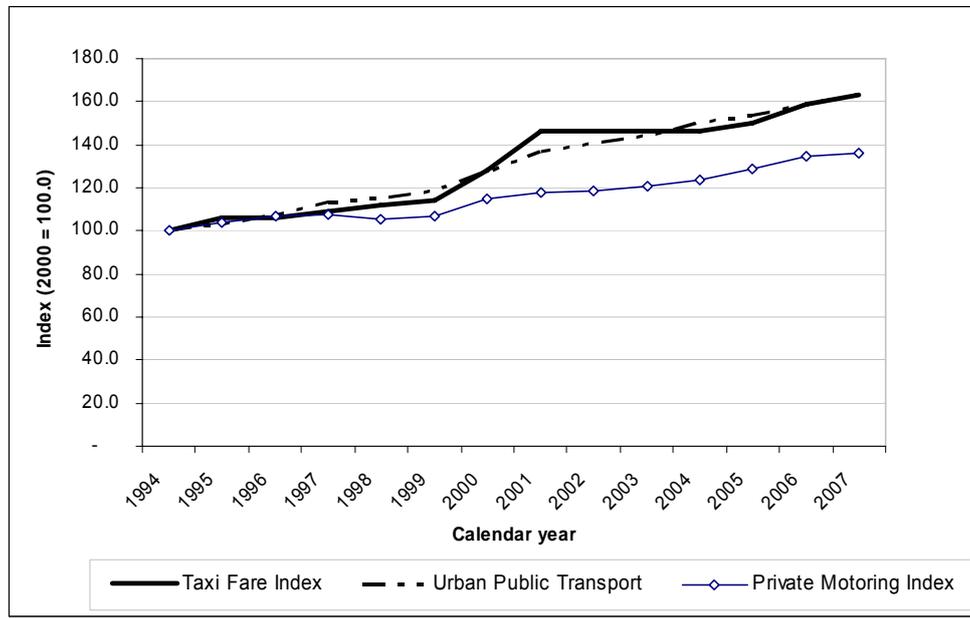
One influence on the mode share of taxis is the trend in taxi fares relative to fares for other forms of transport (such as public transport and private motoring, both of which are to some extent substitutes for taxi services).

Figure 2.6 shows an index of taxi fares since 1994, together with the ABS index for urban public transport fares in Melbourne, and the ABS Private Motoring Index (**PMI**) for Melbourne. The chart shows that over the period since 1994, taxi fare levels have increased at a similar overall rate to other public transport fares. This suggests that the competitive position of taxis versus public transport has remained stable. However, its competitiveness against private motoring has deteriorated.

⁵¹ DOI website

⁵² Considering only journeys that use one method of transport

Figure 2.6 Comparison of Taxi & Urban Public Transport Fares

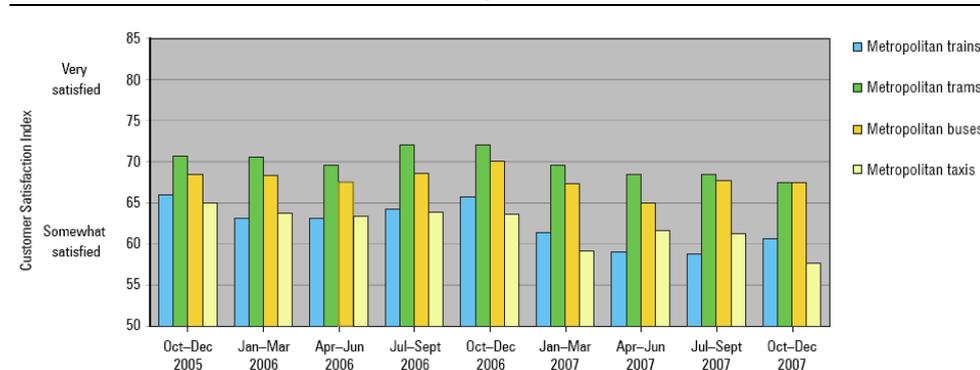


Data source: ABS Urban Public Transport component of the CPI, Melbourne, ESC constructed index of taxi fares based on announced fare movements

2.5 Customer satisfaction

Figure 2.7 shows a declining trend in customer satisfaction over the last couple of years. Between the December quarter 2005 and the December quarter 2007, taxi customer satisfaction decreased from approximately 65% to 58%. This is the largest decline in satisfaction among all modes of public transport. While satisfaction with taxi services is broadly comparable to metropolitan train services, it is substantially lower than satisfaction levels with metropolitan buses and trams.

Figure 2.7 Overall satisfaction with metropolitan train, tram, bus & taxi services, Dec 2005 to Dec 2007



Data source: Track Record, March 2008

Table 2.9 indicates that between 2005 and 2007 satisfaction regarding most aspects of service delivery declined. This was not the case for taxi fares, however, over which satisfaction marginally improved.

Table 2.9 Customer Satisfaction Survey Results

<i>Overall satisfaction with</i>	<i>Oct-Dec '05</i>	<i>Oct-Dec '07</i>	<i>%change</i>
Taxis	64.9	57.6	-11.2
Information services	66.2	63.8	-3.6
Taxi service delivery	68.8	62.5	-9.2
- availability of taxis on Fridays & weekends	53.3	48.7	-8.6
- Mondays through Thursdays	75.6	70.2	-7.1
- wait time after ringing a taxi	64.2	59.2	-7.8
- being able to hail a taxi on the street	53.3	49.5	-7.1
- wait time at taxi ranks	61.6	55.8	-9.4
- willingness of driver to accept fare	73.7	65.2	-11.5
- willingness of driver to take most direct route	67.9	62.0	-8.7
Comfort of taxis	72.0	66.4	-7.8
Taxi ranks	70.7	65.2	-7.8
Booking service	74.2	70.8	-4.6
Driver	70.0	67.2	-4.0
Safety in taxis	69.7	64.9	-6.9
- maintenance and condition of vehicle	71.0	63.2	-11.0
Taxi fares	60.5	61.2	1.2

Source: The Wallis Group, 'Taxis Customer Satisfaction Monitoring Survey: Quarterly Report Oct-Dec 2007'

The customer satisfaction trends show strong declines, and low levels of customer satisfaction, across a range of service attributes. Some of the largest deteriorations related to:

- Vehicle maintenance standards: Customer satisfaction has dropped by 11% over the past two years), and satisfaction with the comfort of taxis has decreased by 8% over the same period.
- Availability of taxis: satisfaction has decreased across all measures including availability of taxis on Fridays and weekends (down 9%), waiting time at taxi ranks (down 9%), ability to hail a cab on the street (down 7%) and waiting time after ringing (down 8%). For several of these measures customer satisfaction is less than 50%.

These survey findings suggest that unmet demand is a significant problem in the metropolitan taxi market. The supply of taxis is too constrained, and the fleet unable to meet customer expectations regarding availability and timeliness of service, especially during peak periods. Due to these supply constraints, taxi usage trends – as shown in Table 2.5 – give a misleading picture of underlying demand, which would be stronger in the absence of supply constraints impacting on service standards and availability.

The customer satisfaction survey data has also been interrogated to determine whether satisfaction levels differ significantly between the inner and outer suburban areas. The findings are presented in Table 2.10, and indicate that there is not a substantial difference.

Table 2.10 **Customer Satisfaction Survey Results**
(Average Dec 2005 to Dec 2007)

<i>Overall satisfaction with</i>	<i>All suburbs</i>	<i>Inner suburbs</i>	<i>Outer suburbs</i>
Taxi service delivery	67.1	65.2	67.5
Wait time after ringing a taxi	62.1	61.9	62.1
Wait time at taxi ranks	60.4	62.3	60.0

Source: ESC analysis of Taxi Customer Satisfaction Survey Data

Based on the information presented in chapter 2 some relevant observations can be made:

- (i) The current taxi industry appears to be failing to meet demand, with user satisfaction falling (particularly on key issues of availability) and a resulting decline in mode share ensure the supply of taxi services matches demand and meets user expectations for service: current indications are that additional licences are warranted
- (ii) ongoing fare adjustments should continue to reflect costs and maintain driver and operator incomes at a reasonable level
- (iii) the most significant opportunity for major productivity improvement is to reduce the impost of licence assignment fees and this warrants further examination.

3.1 Key issues raised by stakeholders

Through the public consultation process of the Review, the Commission received a range of views and perspectives from interested parties. Views from submissions are noted throughout this report. The following is a summary of some of the comment made at the public forums.

- Some stakeholders felt that the fare structure doesn't encourage taxi drivers to undertake shorter journeys. For example, a minimum fare should be considered. It was felt that high occupancy vehicles should be able to recover an increased fare when carrying 5 passengers, as conventional cabs no longer carry five people.
- There were concerns that fares do not adequately cover costs, and the inadequacy of the CPI-1% formula to keep up with costs. Of particular concern was the increased cost of LPG, as well as increases in licence rental. It was noted that licence assignment costs have increased following the introduction of the BSX.
- Taxi industry representatives suggested abandonment of CPI-X fare adjustments, and a need to adjust fares for specific changes in costs and specific changes in technical progress. It was thought that some kind of fuel surcharge may be necessary to deal with LPG, and that too high an X-factor may result in reduced service standards.
- It was also noted that there is a high degree of driver turnover due to inadequate remuneration. Some drivers felt they were disadvantaged and not rewarded adequately. Others noted that excessive numbers of cabs operating quiet shifts was impacting driver earnings.
- Another concern was the competition from hire cars, and potential loss of market share due to increases in taxi fares. More generally there were concerns that segments of the market might drop away if fares are too high.

- It was noted that when fares increase, depot fees and licence fees go up, and not much is left for operators and drivers. In order to achieve reasonable driver remuneration it would be necessary to “get the industry right”.
- Taxi operators and drivers are concerned about a fair and equitable return for effort. There were concerns that public holidays and Christmas Day are charged at the standard rate, and suggestions that the Late Night Surcharge could apply on these days. This would be better than the New Years Eve surcharge which tends to generate angry customers.
- There was a view from Professor Clarke, representing the VTA, that mandated bailment agreements would not be beneficial. They may increase driver incomes, but would reduce the efficiency of the labour market and disadvantage skilled drivers relative to unskilled drivers.
- It was noted that about 300,000 users have difficulty using public transport. The importance of taxis for taxi users on pensions was stressed, as well as the impact of increases in fares on these groups. Some stakeholders suggested that existing subsidies to disabled users were inadequate, and that the MPTP subsidy caps are having a big impact. As a result, the MPTP scheme underspends its budget each year. People with disabilities were concerned about the impact of fare increases on the affordability of taxi use, and the possibility of greater isolation.
- For country taxis the issues raised included the additional costs incurred by country taxi operators due a greater amount of ‘dead running’, the impact of government-funded community transport on taxi use, and shortcomings and inequities in the MPTP program.
- Concern was expressed over unnecessary cost burdens such as the additional costs and loss of resale value due to the uniform yellow livery.
- Some taxi operators noted an increase in aggressive, intoxicated and abusive passengers, as well as increases in fare evasion.
- Driver safety-related expenses should be recoverable through taxi fares.
- Users were also concerned about complaint handling within the industry, including uncertainty as to who to make a complaint to, and the lack of follow-up when complaints are made.

3.2 Further objectives relevant to this Review

The foregoing situation summary highlights the broad based issues of importance to the overall performance of the taxi industry in meeting both the needs of customers and of industry participants. Given these circumstances, the Commission considers it important to have regard to overall objectives for the taxi industry when framing its recommendations in this Review so that they are directed to improving the performance of the industry.

The Commission’s preliminary view is that the following objectives are relevant to the taxi industry:

- Vehicle and driver customer service standards, and the safety and reliability of taxi services, that meet the needs of the consumer
- Taxi waiting times that meet the needs of the consumer

- A fare that is acceptable to the consumer and consistent with the availability of taxi services
- Mobility and community accessibility for the elderly and disabled, and those without other means of transport.
- Taxi service standards for people with disabilities to be equal to those for able bodied people.
- Taxi driver remuneration that is fair and reasonable
- An industry that is increasingly competitive and efficient, with opportunities to grow

These objectives are considered to be appropriate because they are focussed on key requirements of taxi customers and industry participants. The Commission is interested in stakeholder views on the objectives that are relevant to the taxi industry.

In addressing the Terms of Reference for this Review the Commission has considered options that will be consistent with these objectives for the industry.

4 | APPROACHES TO SETTING PRICE PATHS

The terms of reference require the Commission to report on:

An appropriate price setting model to provide for automated fare adjustments for the next 3-5 years, including the timing of such adjustments

This chapter presents the Commission's preliminary views on the regulatory approach to setting taxi fare escalation formulas for the next 3 to 5 years. In addition, the chapter addresses the question of the appropriate productivity adjustment.

4.1 Price Path Formulas

The price adjustment formula applying since the Commission's 2005 review was a CPI-X model. In the 2005 Taxi Fare Review the Commission recommended an 8% 'catch up' fare increase and for subsequent fare increases over the following two years to be set at CPI-1%. This formula resulted in fare increases of 3.0% in September 2006 and 1.1% in September 2007.

In the Interim Report the Commission estimated that unforeseen increases in LPG prices, together with certain costs of compliance with the new industry accreditation regime, would require a fare increase of 4.2%, and recommended that if an interim fare increase were to be made, that should be the amount of the increase.

In the Issues Paper to the current review, three alternative approaches were presented for consideration as possible price escalation formulas for the next regulatory period:

- **An industry based cost index**, such as that used by IPART in NSW, which involves an annual assessment of the movements in input prices for 16 different cost components. IPART uses survey based information, as well as published indices and industry-sourced information for certain costs.
- **Broad economic indices**, such as CPI, the Transportation or Private Motoring components of the CPI, or the Wage Price Index (**WPI**). Victoria used the CPI-X formula in the last fare-setting review. Western Australia uses the Private Motoring Index (PMI) to escalate taxi fares annually.
- **Composite indices**. Use of a combination of readily available published indices relevant to taxi input prices. For example, the ACT uses a Taxi Cost Composite Index made up of a number of published indices.

4.1.1 Stakeholder views

VCOSS indicated a preference for CPI-based fare adjustments because:

People dependent on fixed incomes such as government pensions are particularly vulnerable to price rises. Pensions are linked to CPI – therefore the choice of an ongoing fare adjustment model which is based on the CPI would help to ensure that transport costs do not become prohibitive.

On the other hand, VCOSS noted that fuel and other input prices may have increased faster than CPI, and ‘in the interests of a sustainable industry, mechanisms for recuperating these increased costs are important’. Nevertheless:

From a taxi user perspective, a pricing model which will lead to rapid or substantial increases in taxi prices will have negative financial and social impacts.

The VTA did not support the use of a CPI-X formula, nor did taxi drivers Mr Wally Hunt and Mr David Griffiths. The VTA submitted:

The CPI-X approach is not a satisfactory approach for setting prices in the taxi industry. ... certain adjustments to the CPI-X value are required if we are to obtain a value which will achieve the desired outcomes⁵³ ... Regular estimates of taxi specific costs and productivity trends in the taxi industry based on large random samples are needed if the CPI-X approach is to be adjusted and used effectively.

Taxi driver Mr Wally Hunt indicated that:

The CPI-X approach has not been effective for the taxi industry, and in fact has been quite damaging and hurtful to the industry, particularly the drivers.

The VTA found merit in both the composite index and taxi cost index options, but preferred the latter:

The composite index based on the Transportation sub-indices of the CPI are a better approach and the use of an industry specific composite wage-price index is better still from the viewpoint of comprehensively accounting for distinctive cost impacts

...

While both the composite and industry specific cost indices could be used, at this point in time the most appropriate procedure for setting prices is to use an industry-based cost index.

Mr Hunt favoured an alternative approach, perhaps the use of Wage Price Index (**WPI**) as ‘the taxi industry is a labour intensive industry’.

An alternative proposal was put forward by Mr David Walsh, involving setting fares by use of a bid system. The fare would be set at the average of all the fares bid by operators. Those operators bidding above the average would pay a ‘bid tax’ equal to 25% of the difference between their bid and the mean.

⁵³ VTA submission p.9

4.2 Preliminary assessment of price path formulas

The Issues Paper indicated that the Commission intended to use certain criteria for evaluating the alternate approaches for automated annual fare adjustments. These included:

- providing certainty for the taxi industry and for users
- simplicity, with minimum administrative cost
- ensuring cost reflectivity and ongoing viability of the taxi industry, and
- providing strong incentives for efficiency improvement.

Table 4.1 presents each of the options being considered and identifies the advantages and disadvantages with each method. It therefore summarises the Commission's preliminary assessment of each of the alternative methods identified.

Table 4.1 Advantages and Disadvantages of Alternative Approaches to Adjust Taxi Fares

<i>Cost escalation method</i>	<i>Methodology to increase fares</i>	<i>Advantages</i>	<i>Disadvantages</i>
Approach 1: Industry-based cost index	Escalates fares annually based on a survey of costs, periodically reviewing cost weights, and using published indices together with industry-based estimates of unit cost movements to extrapolate cost estimates annually.	<ul style="list-style-type: none"> • uses data specific to the taxi industry to improve cost reflectivity • captures movements in the cost of items particular to the taxi industry, such as network fees and plate lease fees • provides a detailed breakdown of cost increases by source • enables breakdown of costs into: operators versus driver costs; urban and country costs; and costs by vehicle type (e.g. WAT) and thus informs findings in relation to tariff structure or driver remuneration. 	<ul style="list-style-type: none"> • does not take into account demand-side issues that may result from changes in fares • does not provide strong incentives to achieve efficiency gains because actual cost increases automatically feed into the index. • complex and administratively costly as it requires a significant amount of information to calculate movement in the index on a regular (typically annual) basis. Many of the cost items in the index account for only a small proportion of the index 'leading to resource intensive data gathering for seemingly little effect on the index charge'⁵⁴. Can become highly complex depending on the types and detail of costs modelled (e.g. WAT/premium versus general taxi costs). • may not fully reflect the industry's cost structure, e.g. 'average' taxi cost does not consider economies of scale from different business structures such as operating larger fleets • inconsistent with providing for automated fare increases over a 3 to 5 year period because it relies on information sources that must be scrutinised, with assessments to be made.

⁵⁴ Department of Infrastructure, Energy and Resources, Tasmania (Dec 2005) 'Paper 2 – Taxi Fare Setting Mechanisms and Driver Pay and Conditions', p.33

Table 4.1 (cont)

<i>Cost escalation method</i>	<i>Methodology to increase fares</i>	<i>Advantages</i>	<i>Disadvantages</i>
Approach 2.A: Broader economic cost index	A. CPI Escalates fares annually in line with CPI movement	<ul style="list-style-type: none"> • CPI is independently calculated and published, and is widely available on a timely basis providing certainty and transparency for the taxi industry and users • application of this index is comparatively straightforward, with minimal regulatory costs and information requirements during a pricing period • provides strong incentives to achieve efficiency gains because CPI is relatively unaffected by cost efficiencies achieved by Victorian taxi operators (i.e. it is an 'external' index) 	<ul style="list-style-type: none"> • does not directly include changes in the cost of labour, which comprises a significant portion of costs in the taxi industry • lack of cost reflectivity given the CPI is based on a basket of goods purchased by households and does not capture the movement in taxi-specific costs, e.g. network fees, and does not give sufficient weight to costs such as LPG. CPI has only a 9 per cent weighting of transport costs

Table 4.1 (cont)

<i>Cost escalation method</i>	<i>Methodology to increase fares</i>	<i>Advantages</i>	<i>Disadvantages</i>
<p>Approach 2.B: Broader economic cost index</p>	<p>B. Transportation Group, or Private Motoring sub-group (PMI) of CPI (Note: PMI is 94.4% of the transportation group)</p> <p>Escalates fares annually in line with movement of transportation group or PMI</p>	<ul style="list-style-type: none"> • similar advantages to CPI in terms of certainty, transparency, timeliness, simplicity to administer and low cost • similarly provides strong incentives to achieve efficiency gains because the indices are 'external' • some increase in cost reflectivity compared to CPI • captures many of the items that make up the taxi industry's costs such as fuel, vehicles and repairs and servicing, so reflects taxi industry costs better than the CPI; and • the transportation group includes urban transport fares meaning it may be a closer fit to taxi costs assuming some cost elements are common across modes of public transport (e.g. labour, fuel and capital cost of vehicles). 	<ul style="list-style-type: none"> • the transportation group includes urban transport fares, including personal outlays on taxi fares, creating some degree of circularity (though the taxi fare component is a negligible component); • although many items included in both the transportation group and private motoring sub-group are common to the taxi industry, the nature and weighting of the items are different to those incurred by the taxi industry. For example labour and insurance are a higher share of costs in the taxi industry than other transport industries. Some taxi industry costs (e.g. network fees) are not captured.

Table 4.1 (cont)

<i>Cost escalation method</i>	<i>Methodology to increase fares</i>	<i>Advantages</i>	<i>Disadvantages</i>
Approach 2.C: Broader economic cost index	C. WPI Escalating fares annually by the ABS-published WPI for the Transport sector	<ul style="list-style-type: none"> • similar advantages to CPI in terms of certainty, transparency, timeliness, simplicity to administer and low cost • recognises that labour is a key cost driver in the taxi industry. 	<ul style="list-style-type: none"> • focuses on only one input (i.e. labour), and does not include changes in the cost of non-labour inputs, which comprise up to half of the costs of operating cabs • does not make any allowance for productivity gains; • WPI does not include break-down of cost movements into changes in operator costs and driver costs, so no guidance is provided on how these two labour cost items should be varied.
Approach 3: Composite price index	Escalating fares by an index based on a combination of indices (e.g. a combination of CPI, WPI, PMI, LPG prices etc)	<ul style="list-style-type: none"> • based on independently published indices that are widely available on a timely basis • use is straightforward, and regulatory costs and information requirements would be minimal • process for calculating fare changes would be transparent and simple • would better reflect taxi industry costs than the use of a single broad economic cost index such as CPI or WPI alone • would provide strong incentives to achieve efficiency gains because the indices are 'external' • enables taxi industry-specific productivity gains to be used as the basis for determining the X-factor. 	<ul style="list-style-type: none"> • does not consider differences within the taxi industry, e.g. varying cost structures for WAT/premium/general taxis or regional/metro taxis • may not track costs as well as more direct measurement

The selection of a preferred approach is in part a trade-off between simplicity, the power of incentives for efficiency and cost reflectivity.

Whilst an industry-based cost index is favoured by some Australian jurisdictions because it encompasses costs specific to the taxi industry, this approach is relatively costly and time consuming. For example, IPART reviews NSW taxi fares annually, and Queensland Transport has at times varied fares on a six month basis. In undertaking its annual reviews, IPART draws some information from published indices, but also draws on cost estimates supplied by the industry. It has indicated that it will increasingly rely on cost information from independent sources. Nevertheless, the approach involves a significant degree of detail in cost estimation, and there is scope for greater simplicity. One review noted:

ten of the seventeen items in the NSW taxi cost index (cleaning, government charges, establishment costs, uniforms, tyres, network fees etc) account for less than 20 per cent of the index, leading to resource intensive data gathering for seemingly little effect on the index change.⁵⁵

Another shortcoming of an industry-based cost index is the relatively weak incentives for the industry to pursue cost efficiency, as costs are effectively passed-through directly into prices.⁵⁶

In contrast, a broader economic cost index or the composite cost index approach are simpler to implement, and less costly as they utilise widely published ABS economic cost indices for changes to fares within a pricing period. They also have the potential to provide stronger efficiency incentives.

Among these alternatives the composite cost indices have a better ability to track taxi industry input costs than a single broad-based indicator. In particular, the CPI-X index is considered to be insufficiently cost reflective, and potentially imposes too tight a constraint on driver incomes. Submissions from the VTA, two taxi drivers and stakeholders at the Commission's public forums have indicated dissatisfaction with the current CPI-X approach, as they did not believe it to be sufficiently cost-

⁵⁵ Department of Infrastructure, Energy & resources (December 2005) 'Review of the Taxi and Luxury Hire Car Industries Act 1995, Paper 2 – Taxi Fare Setting Mechanisms and Driver Pay and Conditions', p.33

⁵⁶ In the 2005 Taxi Fare Review the Commission emphasised that one of the principle concerns with approaches to setting fares based on direct measurement of the cost of service, and with frequent price reviews, is that while this may ensure operators are able to recover the costs of supplying services, they are not provided with strong incentives over time to operate efficiently or to maintain the quality of the services they provide. In this situation, any improvements in efficiency that enhance industry profitability will typically result in a reduced price, and this would ultimately reduce industry profits to their previously regulated level. CPI-X forms of regulation which set price paths for an extended period, especially those that rely on indices that are external to the regulated firm or industry (in the sense that the efficiency improvements achieved by the firm or industry do not have a strong direct leverage on the future price path) are considered to provide much stronger incentives to improve efficiency.

reflective. A composite cost index can take into account movements in the wage rates in the economy and give these appropriate weighting.

The Commission sees merit in the use of a specifically constructed index of input prices which uses a small number of published price indices which are relevant to Victorian taxi industry costs, and weights these by the shares of the respective inputs in industry costs to derive a “composite index of input prices”. This approach is broadly similar to that used in some other Australian jurisdictions.

Price indices that are expected to be relevant for constructing the composite input price index include: the ABS Wage Price Index (**WPI**) for the Transport sector (for driver costs); the Private Motoring Index (**PMI**) in the CPI, Melbourne (for a number of vehicle-related and on-road costs); LPG price indices published by FuelTrac; the Insurance Index in the CPI, Melbourne; and the CPI – All Groups, Melbourne (particularly for overhead costs).

The Commission does not propose to include licence assignment costs in the construction of this index, due to its nature as an economic rent, and to avoid the circularity that the inclusion of these fees would introduce into the index. However a base level assignment fee is included (but not indexed) to ensure that the other cost items are not overrepresented – and for this purpose it is proposed that the average of the 2000 and 2004 levels be used in constructing the index weights.

The composite input price index would normally need to be adjusted for forecast productivity improvements to derive a unit cost path relevant for price setting. This is because in an effectively competitive market prices will track industry unit costs. This is discussed further in section 4.4 below.

The composite index approach has a number of advantages. It is relatively simple to implement, as it primarily utilises indices published by the Australian Bureau of Statistics (**ABS**), and LPG price indices. This approach would be designed to generate a price path that adequately tracks costs, which is consistent with ensuring that price levels remain adequate for the industry over the pricing period but are not excessive. The composite cost index approach would also provide strong efficiency incentives. However, an index of input prices alone will not reflect changes in unit costs over time unless there is also an allowance for changes in productivity. Therefore, the Commission considers a productivity adjustment in the form of an X-factor would remain appropriate.

The composite price index approach is consistent with current practice in some other jurisdictions such as the ACT, where it has been effective. It also has a significantly greater degree of support in the taxi industry than the current CPI-X formula. For example, the VTA stated:

The composite index based on the Transportation sub-indices of the CPI are a better approach and the use of an industry-specific composite wage-price index is better still from the viewpoint of comprehensively accounting for distinctive cost impacts.⁵⁷

⁵⁷ VTA submission, p.10

The use of a weighted index was also supported by taxi driver Mr Wally Hunt⁵⁸, and it would be compatible with views expressed in other submissions, for example VCOSS:

*Increases in the price of fuel and other input costs in recent years may well have increased the operating costs of taxis at a rate greater than the Consumer Price Index (CPI). In the interests of a sustainable industry, mechanisms for recuperating these increased costs are important.*⁵⁹

A notable feature of the composite index approach is that because more than half the weighting is given to the WPI index, which tends to increase at a faster rate than CPI, it will tend to generate higher taxi fare increases over time than a CPI-X approach.

The Commission is also of the view that a detailed examination of industry costs is appropriate at the commencement of each new pricing period (i.e. every three to five years). In the current review the Commission has conducted a broad based survey of taxi operators and drivers for this purpose. This is consistent with VTA's statement that:

*Regular estimates of taxi specific costs and productivity trends in the taxi industry based on large random samples are needed if the CPI-X approach is to be used effectively.*⁶⁰

However, while the Commission agrees that such studies are worthwhile at the commencement of each pricing period, it does not support the use of such detailed cost studies during the pricing period. This would be inconsistent with the objective, stated in the terms of reference, of providing for automated fare adjustments within the regulatory period. Furthermore, as the Commission emphasised in the 2005 Taxi Fare review, resetting prices based on realised cost outcomes would result in a lack of incentives for taxi operators to improve cost efficiency and productivity. It would also increase administrative costs if such analysis were carried out frequently.

Preliminary conclusions:

The Commission sees merit in the use of a specifically constructed composite index of input prices, using a small number of published price indices relevant to Victorian taxi industry costs, including LPG price indices. Each index would be appropriately weighted to reflect relative importance of the inputs in total costs. The Commission's preliminary view is that a productivity adjustment would remain appropriate. Such a composite index will require period re-weighting every 3-5 years to remain a reasonable accurate reflection of the taxi industry cost mix.

⁵⁸ Mr Wally Hunt submission, p.4

⁵⁹ VCOSS submission, p.3

⁶⁰ VTA submission p.10

The proposed price path for the next 3-5 years would therefore be determined by a $CPI-X$ formula, where CPI is the composite input price index, and X is the productivity adjustment.

4.2.1 Composite input price index

For the purposes of escalating taxi fares over a three to five year period, the Commission has formulated a composite index of input prices which can be calculated from published sources.

The following input price indices are used:

- the ABS WPI for the Transport sector is used as the input price index for driver incomes
- the ABS PMI, a component of the CPI Melbourne, is used as the input price index for motor vehicles, repairs and maintenance, tyres and washing and other on-road costs, including a component of the fuel costs (noting that the automotive fuel price index has a 30.5% weighting in the PMI⁶¹)
- FuelTrac reported LPG retail prices are used for fuel (taking into account the fuel component in the PMI)
- the Insurance Index in the CPI Melbourne is used as the price index for insurances such as comprehensive, income protection and WorkCover
- the CPI – All Groups, Melbourne is used for network fees, office, uniform and other costs.

Licence assignment fees are included in the index at an estimated 2002 amount (see section 4.3.3). The Commission considers that fare increases should be escalated by CPI over the term of the 3 to 5 year pricing period, in order to maintain their real value but avoid incorporating movements in economic rent.

The weights for the composite input price index are derived from PwC's 2007 survey of drivers and operators. The composite index approach is summarised in Table 4.2 and Equation 4.1.

⁶¹ ABS (2005) 'A Guide to the Consumer Price Index', p.32

Table 4.2 **Parameters for Composite Input Price Index**

	<i>Weight (%)</i>	<i>Escalator</i>
Driver payments & operator income ^a	56.9	WPI (Transport)
Vehicle costs, maintenance & tyres, some fuel ^b	11.2	PMI (Melbourne)
Rego & Insurance	3.0	Insurance component of CPI (Melbourne)
LPG ^b	7.9	FuelTrac
Network fees, office & misc	7.1	CPI (Melbourne)
Base licence fee	13.9	CPI (Melbourne)
Total	100.0	

^a operator salary equivalent included in cost base

^b Of the total 9.5% weighting given to LPG in the taxi operating costs, 3.8% is contributed by the PMI index (i.e. 30.5% or 12.4), and 5.8% is contributed by the FuelTrac LPG price data. Weights are based on costs adjusted for March quarter 2008 average LPG prices.

Sources: Essential Services Commission (June 2005) *Final report: Taxi Fare Review 2005*, p.44 & p.37; PwC 2007 survey results

The formula for calculating the aggregate index of input prices, W, from the individual input price indices and their shares in industry costs is as follows:

$$\text{(Equation 4.1)} \quad \Delta W = \sum_k s_k \ln \left(\frac{w_{kt}}{w_{kt-1}} \right)$$

Where the symbol “Δ” means “proportionate change in”, and W is the index of input prices, and s_k is the share of input k in taxi operator costs (excluding licence assignment fees), and w_k is the price index of input k .

Preliminary conclusion:

The composite input price index (CPI) proposed by the Commission is defined in Equation 4.1 and Table 4.2.

4.2.2 Timing of fare adjustments

The timing of fare adjustments is a matter on which the Commission must also make recommendations. The changeover costs of a taxi meter are estimated to be approximately \$140 per cab per changeover. The recent fare increase following the Commission’s Interim Report explicitly provided for one meter changeover in the fare level (adding approximately 0.2% to the fare). A fare adjustment formula that provides for more frequent meter changeovers would add to industry costs and the fare level. Therefore, an annual fare adjustment is preferable to more frequent adjustments.

In the past the annual fare adjustment has been based on June quarter to June quarter movements in the CPI. Under the composite index approach, it is possible

this may not accurately reflect average input price movements from one year to the next due to the volatility of LPG prices. Therefore, it is likely to be more appropriate for the annual fare adjustment to be based on the movement in the average composite index for the 4 quarters ending June of that year.

Given the interim fare adjustment in March 2008 was based on data for the December quarter 2007, the initial fare adjustment relevant to September 2008 should be based on a CIPI-X formula which captures the movement from the December quarter 2007 to the June quarter 2008. Accordingly, to commence from the December quarter 2007 as the new base, and transition to annual adjustments based on four quarterly averages, the fare adjustment formulas would be as follows:

(Equation 4.2) September 2008 adjustment:
$$\frac{CIPI_{Jun'08}}{CIPI_{Dec'07}} - \frac{X}{2}$$

(Equation 4.3) September 2009 adjustment:
$$\frac{CIPI_{AvgSept'08toJun'09}}{CIPI_{Jun'08}} - X$$

(Equation 4.4) September 2010 adjustment:
$$\frac{CIPI_{AvgSept'09toJun'10}}{CIPI_{AvgSept'08toJun'09}} - X$$

Adjustments in subsequent years would be based on Equation 4.4. Where a fare adjustment calculated by the formula would not represent a material adjustment, then it should be possible to carry forward the adjustment to the following year (in that case the denominator of the adjustment formula would be carried over). For example, a material change may be a $\pm 3\%$ (being the top of the Reserve Bank of Australia's CPI target). An adjustment might be made only once the total adjustment exceeded the 3% threshold.

Preliminary conclusions

Annual price adjustments are to be preferred to more frequent adjustments due to the costs of implementing fare adjustments.

The formulas for making annual fare adjustments are given by equations 4.2 through to 4.4.

To save costs a materiality threshold for changing fares of 3% should apply with fare adjustments carried forward to the next year if less than 3%.

4.2.3 Allowing for security screen installation

On 30 April the Minister for Public Transport announced that security screens will be fitted to all existing taxis, and the Government will fund 50% of the cost, the remainder to be funded by individual taxi operators. In order for taxi operators to

fund 50% of the cost, fares would need to increase to provide corresponding additional revenue.

The cost has been indicatively estimated in media reports:

The [Victorian] Government expects the screens to cost \$1000 to \$1200, but they sell for about \$1350⁶²

This expenditure represents a capital cost item to be depreciated over several years – typically the remaining years the cab is in operation (although it may have recovery value if it can be reinstalled on another cab). For simplicity, if it is assumed that the average operational life of a security screen is 4 years, then the depreciation and financing (at 10% interest) would together amount to around \$310 to \$350 per annum, based on the range of costs quoted above. Recovery of 50% of this amount through taxi fares would require an additional 0.1% increase in the level of fares. This will be given effect commencing in September 2008.

4.3 Productivity adjustment

4.3.1 Purpose

The Commission's objective in formulating a price path is to reflect the expected year-to-year movement of prices in an effectively competitive market. If price movements are less than this, the financial viability of efficient industry participants may be threatened. If price movements exceed those of an effectively competitive market, then the industry gains at the expense of consumers.

In an effectively competitive market, prices will track industry unit costs, including a normal rate of return on capital⁶³. In turn, the industry unit costs (**UC**) follow the path:

$$\text{(Equation 4.5)} \quad \Delta P = \Delta UC = \Delta W - \Delta TFP$$

Where the symbol “ Δ ” means “proportionate change in”, P is the taxi fare index, W is an index of input prices (i.e. the composite price index previously discussed, and defined in equation 4.5) and TFP is the total factor productivity index for the industry. TFP is defined as the ratio of an index of all outputs to an index of all inputs.

Hence, a composite input price index alone does not measure changes in unit costs. It is necessary to also have regard to productivity gains.

4.3.2 Regulatory approaches to productivity measurement

The evaluation of the extent of productivity gains which are available in the taxi industry has been the subject of significant analysis by economic regulators. Whilst

⁶² <http://www.theage.com.au/articles/2008/05/01/1209235059198.html>

⁶³ Meyrick and Associates (September 2003) 'Regulation of Electricity Lines Businesses Resetting the Price Path Threshold – Comparative options', p.5

all industries have scope to extract some productivity gains, assessing how to set an appropriate target for taxis (and the subsequent quantum of this productivity gain target) is a debate which is yet to be clearly resolved.

In the Commission's 2005 Taxi Fare Review an X-factor or productivity gain adjustment of 1% was applied. The approach in other states has been:

- **New South Wales:** In its 2007 Review of NSW taxi fares, IPART considered broader estimates of productivity produced by the Australian Bureau of Statistics (**ABS**). The ABS estimated labour productivity in the transport and storage industry to have increased by 3.0% between 2001/02 and 2005/06, and multifactor productivity in all industries to have increased by 0.8% over the same period. IPART concluded that while expected productivity gains in the taxi industry over 2007/08 are likely to be lower than the economy as a whole, for example due to increases in traffic congestion, there is nothing specific to the taxi industry which suggests that it will not achieve productivity gains – as do other industries. IPART forecast an improvement in labour productivity in the taxi industry of 0.7% over the next 12 months and as labour costs account for approximately half of total costs, they applied a productivity adjustment of 0.35% to the cost movement. No productivity adjustment is applied to non-labour costs as these are linked to movements in ABS price indexes (such as CPI) which already contain an element of productivity gain. The 2007 adjustment is lower than the 0.5% productivity adjustment applied at the 2006 review. IPART also then allocated 75% of the productivity adjustment to drivers and 25 per cent to operators.⁶⁴
- **Australian Capital Territory:** the ICRC assessed the merit of an X factor for taxis in its 2004 decision (covering fares to 2007). The ICRC decided that an X-factor was not necessary at that time as large parts of the cost index used ABS price indexes which already contain an element of productivity gain.⁶⁵

4.3.3 Sources of productivity gain in the taxi industry

Taxi services are a labour intensive activity, and as such some argue that the scope of productivity gain is less than in some other industries. On the other hand, it is observed that there has been a range of technology improvements in the industry, and as taxi services compete with other modes of passenger transport, the taxi industry would be expected to generate total factor productivity improvements to remain competitive⁶⁶. Furthermore, productivity will also be affected by environmental conditions such as growth in taxi demand, and associated increases in taxi utilisation and reduction in fixed costs per vehicle, as well as operational efficiencies and improvements in service quality.

Some of the opportunities for realising productivity gains in the taxi industry include:

⁶⁴ See Section 4

<http://www.ipart.nsw.gov.au/files/Maximum%20fares%20for%20taxis%20in%20NSW%20-%20Final%20report%20-%20July%202007.PDF>

⁶⁵ http://www.icrc.act.gov.au/__data/assets/pdf_file/0004/16789/finaltaxireport310504web.pdf

⁶⁶ ESC 2005, p.4

- improvements in technology such as through the use of network global positioning systems (**GPS**) to increase the effectiveness of central despatch, or by expanded use of the existing automated Short Message Service (**SMS**) booking service for taxis, to reduce network services costs
- economies of scale, for example by consolidating network bureau services⁶⁷, or increasing fleet sizes
- further training of cab drivers to enable them to improve service quality and comparative value to the customer, and thereby increase demand for services
- market segmentation and the offering of better tailored services to market niches,
- operational improvements to increase the ratio of paid to unpaid kilometres driven, including reductions in dead kilometres and better cab utilisation through improved positioning of cabs between jobs or improved selection of the cab to attend a job; better route selection; and improved decisions in relation to the shifts cabs operate (i.e. having the 'right' number of cabs in operation at any one time).

Cab efficiency can also be detrimentally affected by increases in traffic congestion.

Some submitters commented on the scope for further productivity improvement. Mr David Griffiths stated:

We need a single device which is a radio, meter and GPS navigator in one. Our equipment is 20 years old and completely obsolete, another reason for poor service in peak periods is that this equipment doesn't function under pressure.⁶⁸

He added:

prior to the computers with voice despatch I believe we gave better service. The operator could give a driver several local jobs at once, multiple hire could occur. Now the system won't allow you to see or accept jobs when hired, and if you recall a booking with Yellow cabs, which could be across the suburb and waiting out the front so as to be unlikely to pick up, you don't get to use the radio for 2 hours, even if people can't get cabs. When there is a backlog of jobs the computer will send you the oldest first, these often are not there and you waste your time getting "no job" after "no job". The human operator would have sifted these jobs out of the system. My response is to do less radio work.

Mr Griffiths also noted that multi hire is 'one way to pick up productivity in peak times'.

The VTA maintained:

Productivity gains in a complex service industry such as the taxi industry are likely to be low and difficult to identify and estimate.

⁶⁷ VTA submission to NCP review

⁶⁸ Mr David Griffiths submission

4.3.4 Analysis

The findings of the PwC 2004 and 2007 studies can be used to indicate the key trends in productivity for taxis in Victoria. The methodology and the data the Commission has used to estimate productivity gains is explained in Appendix B, and the detailed results are also in the Appendix.

The summary results of this analysis are as follows:

- Observed fare revenue from the surveys has been deflated using an index of taxi fares (depicted in Figure 2.6 to derive an output index of taxi services per cab. This output index per cab has decreased on average by 1.7% per annum, or 11% in total, between 2000 and 2007. This is because the market as a whole is estimated to have grown at an average rate of 0.8% per annum over the same period, while the number of taxi licences has increased at an annual average rate of 2.5% per annum over that period.
- Observed costs from the surveys (excluding assignment fees) have been deflated using the composite input price index (described in above) to derive an input index per cab. This index has decreased on average by 1.8% per annum between 2000 and 2007. In part this may reflect the use of lower skilled drivers.
- Productivity is estimated to have increased between 2000 and 2007 at an annual rate of 0.6% per annum.

These estimates are subject to uncertainty because they rely on the information derived from two surveys of taxi cab revenue and costs, as well as estimated indices for taxi fares and input prices. On the other hand, they are internally consistent – for example, if the input price index overstates input price trends, this would be reflected in a higher estimated TFP, and vice versa.

An alternative approach would be to rely on data for taxi trips and paid kilometres per cab. However, such information for the Victorian taxi industry is very limited and of uncertain reliability.

The observed reduction in inputs per cab and improvements in productivity can arise from a number of sources, including:

- greater use of peak period cabs which concentrates resources in higher demand periods (and reduces average kilometres per cab over the entire fleet),
- implied use of lower income labour as driver incomes have not kept pace with the WPI,
- cost efficiencies in maintenance and repair costs through increased use of in-house maintenance and repair capabilities by fleets, reductions in insurance costs through self insurance, and significant reductions in overheads through IT and other improvements.

4.3.5 Traffic congestion

Increases in traffic congestion impose a significant risk in relation to taxi industry productivity. As the VTA has emphasised:

increased levels of traffic congestion can undermine the productivity gains associated with technological improvements. It is

not unreasonable to argue that with increased traffic congestion the X for Melbourne taxis may have either a zero or small negative value because, with growing metropolitan congestion, extra costs are imposed on taxi services.⁶⁹

The Bureau of Transport and Regional Economics (**BTRE**) has prepared historical estimates and forecasts of delays to road traffic caused by congestion for each of Australia's capital cities.⁷⁰ These estimates indicated that in Melbourne there has been a steady increase in transit delay, from 0.276 minutes per km in 2000 to 0.356 minutes per km in 2007, representing an increase of 3.7% per annum over this period. BTRE's forecasts suggest that transit delays will increase to 0.419 minutes per km in 2012, representing a slightly lower rate of annual increase in traffic delays of 3.3% over the next five years.

It is the rate of increase in traffic delay which affects taxi cab productivity growth. As the rate of increase in transit delays over the next five years is forecast to be slightly lower than it was over the period 2000 to 2007, increasing traffic congestion alone will not justify a productivity factor over the next five years which is lower than the rate of improvement in productivity over the last seven years.

4.3.6 Preliminary conclusions on productivity trends

The Commission proposes to adopt a forward looking productivity factor having regard to long-term trends in industry productivity. The Commission's preliminary analysis of the period 2000 to 2007 indicates that the rates of productivity realised were approximately 0.6% per annum. A key concern is whether this rate of productivity growth may be impacted in future by increases in traffic congestion. However, information and forecasts prepared by BTRE suggests that while traffic congestion in Melbourne will continue to rise, the forecast rate of increase is slightly below the rate recorded during the period 2000 to 2007. Since this rate of increase affects the rate of increase in productivity, the Commission's preliminary conclusion is that traffic congestion will not impose a greater constraint on productivity growth in the forthcoming period than it has in the period 2000 to 2007. Therefore the historical productivity trend remains the best available forecast for productivity improvement over the next three to five years.

Preliminary conclusion:

Based on its preliminary productivity analysis the Commission's preliminary view is an X-factor of 0.5% should apply over the next 3 to 5 years.

4.4 Adequacy of current fare levels

When setting price paths it is appropriate to consider the adequacy of current fare levels as a starting point against which future fare adjustments should be made.

⁶⁹ VTA submission p.9

⁷⁰ BTRE (2007) 'Estimating Urban traffic and congestion cost trends for Australian capital cities: Working Paper No 71', p.110. This data is used by IPART in its '2008 Review of Taxi Fares in NSW, Issues paper'.

The Commission has provided advice to the Minister for Public Transport on the impact of liquid petroleum gas (**LPG**) prices on taxi operators in its Interim Report submitted on 12 March 2008. The Interim Report examined the adequacy of current fare levels in detail, and the Commission recommended that if an interim fare increase were to be made, the required fare increase was 4.2%.

This section briefly reviews some of the information and observations from the Interim Report, as well as whether a fare increase is appropriate in September 2008 in light of the 4.2% fare increase implemented in March 2008.

4.4.1 Costs and margins

Substantive analysis of the adequacy of current fare levels requires the estimation of taxi costs and revenues. To assist the ESC in developing these estimates, the Commission engaged PricewaterhouseCoopers (**PwC**) to undertake a broad-based survey of operators and drivers.⁷¹ This has provided one source of data which the Commission considered in conjunction with submissions to the Draft Report and other data gathered by the Commission.

The operator survey was mailed in December 2007 to approximately 2,600 taxi operators in the metropolitan and regional areas, and the driver survey was mailed to approximately 4,100 drivers contracted through bailment agreements (that is, drivers who did not hold a taxi licence or operate one on assignment). In total 431 responses were received. This data forms the basis of cost estimates for 2007. This data is also compared to the results of a smaller previous survey carried out by PwC on behalf of the Commission as part of its 2005 Taxi Fare Review, which provided cost estimates for 2000 and 2004.

Table 4.3 summarises the PwC cost estimates for 2000, 2004 and 2007. These estimates are representative of an 'average' taxi operator in Victoria. Notably, however, taxi operations are small businesses with differing cost structures, for example, due to different approaches to vehicle purchase, maintenance, and different rates of taxi use. Hence the costs of individual operators may vary significantly from those of an average operator.

⁷¹ See the Commission's "Taxi Fare Review 2007/08: Interim Report", Appendix C

Table 4.3 **Surveyed taxi operator costs (\$ per median Victorian taxi)**

	2000	2004	2007
Driver payments	63,097	66,283	71,411
Vehicle lease payments/finance	5,923	5,397	6,653
Licence assignment fees	19,213	20,580	23,418
LPG	11,168	10,019	12,314
Network fees	5,144	5,831	6,739
Repairs/maintenance, cleaning & tyres	5,307	6,236	8,546
Registration & insurance	4,056	5,003	4,274
Office & other	7,499	8,476	3,361
Total	121,407	127,825	136,716
Estimated revenue	126,194	132,566	142,823
Operator margin	4,787	4,741	6,107
Operator margin (% of revenue)	3.8	3.6	4.3

Sources: Essential Services Commission (June 2005) *Final report: Taxi Fare Review 2005*, p.44 & p.37; PwC 2007 survey results

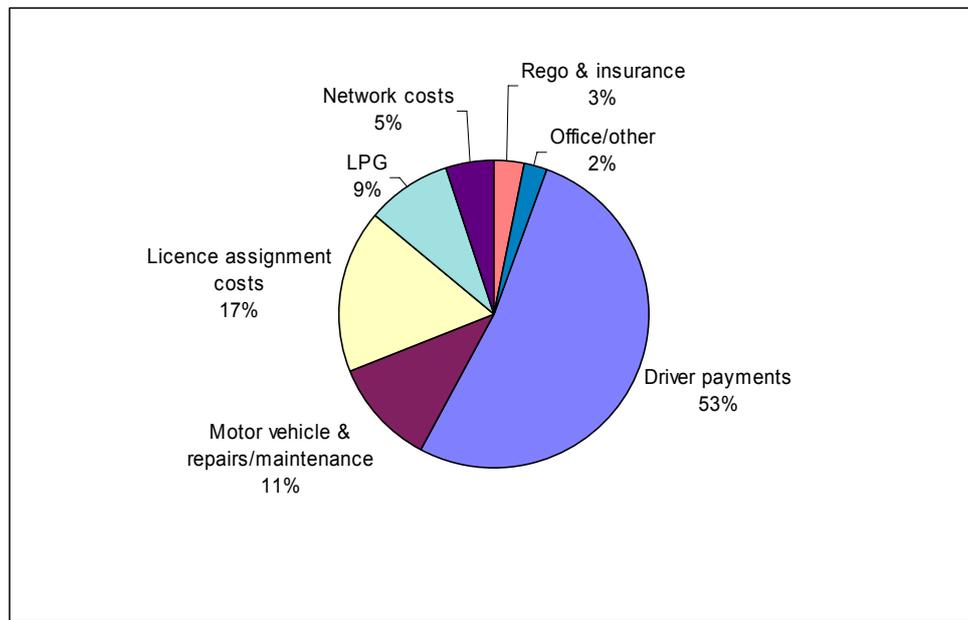
The relative importance of each of the main taxi operator costs are shown in Figure 4.1. For example, LPG costs were estimated to represent 9% of taxi operator costs in 2007, while licence assignment fees represented 17% of costs. Driver payments, estimated to be 50% of a median taxi's revenue, amount to more than 50% of costs because revenue exceeds costs.

Based on the PwC cost estimates above, it is possible to identify the economic costs of operating a taxi-cab, as shown in Table 4.4. When the revenue that accrues to licence holders is combined with the taxi operator margin, the total return is over 20%. This is discussed further in section 4.4.4.

Table 4.4 **Economic costs of median Victorian taxi (\$ p.a.)**

	2000	2004	2007
Economic costs	102,194	107,245	113,298
<i>Margins:</i>			
Licence holder revenue	19,213	20,580	23,418
Operator margin	4,787	4,741	6,107
Total margin	24,000	25,321	29,525
Total margin (% of revenue)	19.0	19.1	20.7

Figure 4.1 **Breakdown of taxi operator costs 2007**
(Median Victorian taxi)



Data source: PwC 2007 survey results

4.4.2 Stakeholder comment & comparison with other data

Subsequent to the Interim Report, the VTA provided its own cost estimates to the Commission based on its discussions with several major fleet managers. The VTA estimate of the revenue per cab was \$161,200, and costs per cab were \$171,575 for a margin of -6.0%. The estimates of annual costs provided included: licence assignment fees, \$29,040; LPG costs, \$20,300; repairs, maintenance and cleaning, \$13,000; insurance and registration costs, \$6,214.⁷² The VTA also suggested that the PwC taxi operator survey sample may under-represent large fleet operators.⁷³

The Commission was able to make an independent assessment of licence assignment fee costs for a metropolitan taxi operator based on BSX data for assignments over the period 2005 to 2007, and assuming the average duration of an assignment is two years. The derived estimate using this method was \$24,000 for calendar 2007, which is close to the figure estimated by PwC from the survey. The estimate derived from BSX data may underestimate the true average for the metropolitan area, depending on escalation clauses within assignment contracts.

⁷² Comparative costs from the PwC survey: licence assignment fees, \$23,418; LPG costs, \$12,314; repairs, maintenance and cleaning, \$7,416; insurance and registration costs, \$4,839.

⁷³ Fleet profile of respondents to the PwC survey: 65% operated 1 taxi, 32% operated 2-20 taxis, and 3% operated fleets with more than 20 taxis.

On the other hand, the PwC estimate is for Victoria as a whole (i.e. is a median cost of metro, outer-suburban, regional and country licences).

The Commission was also able to obtain actual data from a major metropolitan taxi fleet manager for certain costs in calendar 2007. The data from the fleet operator showed that its LPG costs were \$13,351 per cab; repairs and maintenance costs were \$4,540 per cab⁷⁴; and insurance and registration costs were \$5,664 per cab.⁷⁵

The four cost items examined using independent sources of actual data were in total 0.2% higher than the PwC survey data results. By contrast, the figures presented by the VTA in respect of these four cost items were 43% higher than the PwC estimates. In light of this large discrepancy, the Commission is not convinced that the VTA data is reliable and does not propose to rely on it for the purpose of this Review.

On the other hand, the higher estimated costs for fuel, maintenance and insurance⁷⁶ for the metropolitan fleet manager (these three items being 12% higher than the PwC estimates) may be explained in part by a more intensive use of cabs by the fleet operator, as indicated by the higher estimated higher revenue per cab (which is 13% higher than the PwC estimate). Insurance costs may be higher in metropolitan areas than in country areas. Therefore, these estimates do not appear to be necessarily inconsistent with the PwC data, which applies more broadly to the taxi market as a whole.

The PwC survey based estimates are for a representative taxi only. As mentioned, costs will differ between operators due to different business strategies and operations. A survey necessarily has limitations associated with sampling error. Furthermore, the individual line elements of the PwC analysis will be subject to a greater degree of uncertainty (and potential sampling error) than totals of several cost items. However, does not have more accurate information available, and information provided by the industry has been found to be deficient.

If relevant parties have further information on actual taxi operating costs they may provide this information to the Commission.

4.4.3 Treatment of licence assignment fees

As indicated above, while licence assignment fees are a cost to the taxi operator, the Commission's view is that they are part of the profits of the industry as a whole – namely, an economic rent distributed to taxi licence holders. The ability of taxi licence holders to capture these rents is a function of the constraint on the number of licences made available by the licensing authority.

Furthermore, the inclusion of increases in assignment fees as a cost for the purposes of determining fares would introduce circularity (increases in assignment

⁷⁴ This includes minor repairs only, as major repairs are covered by insurance

⁷⁵ Comparative costs from the PwC survey: LPG costs \$12,314; repairs and maintenance costs \$6,346; and insurance and registration costs \$4,839 per cab.

⁷⁶ Note that the Commission understands that Metropolitan fleet managers typically use self-insurance.

fees would generate higher fares, in turn resulting in higher assignment fees, and so on). For example, VTA has submitted to the Commission that it should make allowance for licence assignment fees of \$29,000 per annum, which would involve increasing fares in order to permit a high return to licence holders. The Commission's preliminary view is that it would not be appropriate to include the increases in assignment fees in a formula for re-determining fare levels.

Similarly, the Commission's preliminary view is that it would not be appropriate, for the purposes of the assessment of fare adequacy, to include the recent increases in assignment fees in the cost base⁷⁷. One approach would be to exclude licence assignment fees from the costs. A more conservative approach is to calculate taxi operator profit margins assuming licence assignment fees constant at a past level. The latter approach is taken in this analysis, and the average of the estimates for 2000 and 2004 was used. This is a convenient reference period as tradeable licences ceased being issued by the Government in 2002.

4.4.4 Operator margins and cost trends

Table 4.5 shows taxi operator margins in 2000, 2004, and 2007. It also shows the total of taxi operator margins and licence assignment fees as a percent of total taxi fare revenue. Lastly, it shows the taxi operator margin calculated when licence assignment fees are at the estimated 2002 level⁷⁸ – the benchmark used for this analysis. The adjusted taxi operator margin in calendar 2007 is estimated to be 6.7% of fare revenue.

The taxi operator margins provide remuneration for additional time spent by taxi operators in running their businesses. In NSW, where operator margins have been treated as a cost ('operator salary equivalent') rather than as a margin, as in the PwC analysis of taxi costs in Victoria, the urban operator salary equivalent (based on time spent on administration) has been estimated at just under \$10,000 per annum.⁷⁹ This is approximately 5% of total NSW urban taxi costs, including the operator salary equivalent. This 5% benchmark is broadly appropriate taking into account the fact that the NSW benchmark costs, including the estimation of the operator salary equivalent, are based on notional hourly wages and entitlements that are believed to be higher than the rates actually received by drivers and operators.

The benchmark required operator margin of 5% is only slightly higher than the 4.5% margin estimated for a median Victorian taxi in 2007. This analysis indicates that the 2007 operator margin was adequate.

⁷⁷ Note that the Independent Competition and Regulatory Commission (ICRC) took a similar approach to the question of network fees in the ACT which it considered to be excessive. See ICRC (May 2004) 'Final Report: determination of taxi fares for the period 1 July 2004 to 30 June 2007', pp 27-30

⁷⁸ Estimated '2002' licence fee is the average of the 2000 and 2004 licence assignment costs source from the PwC 2004 survey.

⁷⁹ PwC (January 2008) 'Ministry of Transport: Review of Weightings in Taxi Cost Model', p.22

Table 4.5 **Taxi operator & licence holder margins (% of revenue)**

	<i>2000</i>	<i>2004</i>	<i>2007</i>	<i>Apr-Jun 2008 (f)^a</i>
Taxi operator margin (% of revenue)	3.8	3.6	4.3	5.5
Licence holder revenue share	15.2	15.5	16.4	15.7
Total margin	19.0	19.1	20.7	21.3
Taxi operator margin (constant '2002' assignment fees ^b)	3.3	4.1	6.7	7.9

^a Forecast assumes average LPG price of 65.2 cpl, compared to 49.6 cpl average for 2007. All other costs remain unchanged Fare revenue increases by 4.2% It is assumed that the fare increase does not flow through to driver income.

^b Estimated '2002' licence fee is the average of the 2000 and 2004 licence assignment costs source from the PwC 2004 survey.

Table 4.4 also shows a forecast of taxi operator margins for the three month period ending June 2008. This is based on very simplified assumptions, and is intended primarily to take into account the large increase in LPG prices in this period, when compared to the average for calendar 2007⁸⁰. It also takes into account the flow through of the 4.2% fare rise in late March. It is assumed that this fare increase did not flow through to taxi drivers. The analysis shows that the adjusted taxi operator margin is to 7.9%, which is higher than the 5% benchmark.

Table B.1 in Appendix B shows the calculated values of the Composite Input Price Index over time. Between the June quarter 2005 and the December quarter 2007, the input price index increased by 12.7% in total, while the CPI, All Groups increased by 7.9% over the same period. The 4.2% 'one off' fare increase in March 2008 is approximately equal to the difference between these two indices.

As discussed in 4.2.2 above, the Commission's preliminary view is that the September 2008 increase will be based on the movement in the CIPI over the six month period from the December quarter 2007 to the June quarter 2008.

The Commission's final recommendation in relation to the September 2008 fare adjustment will have regard to a range of matters, including the June quarter input price movements. There may be a case for a modest increase in fares in September 2008, and the formula described in section 4.2.2 would provide for such an increase. The 4.2% increase in March is, at present, seen as having addressed, or substantively addressed, unit cost movements over and above CPI from 2005 to December 2007. However, the Commission welcomes other information and input from the industry relevant to the consideration of this question.

Based on the information available, the Commission's preliminary view is that the current fare level is adequate to facilitate the financial viability of the industry. But

⁸⁰ The assumed LPG price for the period from January to June 2008 is the average for the March quarter 2008.

there is an issue with the burden that assignment fees place on the industry. Given this, it is open to question whether the fare level is fully consistent with some of the other objectives of the Commission, such as economic efficiency, and being in the long-term interests of consumers.

Preliminary conclusions:

The best available information the Commission has at the present time indicates that current fare levels are adequate to facilitate the financial viability of the industry and further 'one off' fare adjustments do not appear to be necessary at the present time. There may be a case for a modest increase in fares in September 2008, and the formula described in section 4.2.2 is expected to provide for such an increase. The 4.2% increase in March is, at present, seen as having addressed, or substantively addressed, unit cost movements over and above CPI from 2005 to December 2007. However, the Commission welcomes other information on this question.

Licence assignment fees are imposing a significant burden on the taxi industry, and options should be considered to address this.

The Commission is required to report on:

The appropriateness of the taxi fare structure within the current market for taxi-cab services in Victoria

A comprehensive review of tariff structures has been recommended in several reviews, including the Foletta Inquiry in 1986, and several reviews since then, including the Commission's 2005 Taxi Fare Review.

Table 5.1 sets out the current taxi fare schedule in place since April 2008. The table shows the relative importance of each of the main fare components in the typical taxi fare, based on the calculation of a standard taxi fare.

The main features of the tariff structure are:

- Firstly, the use of fixed charges and variable charges: These are the most important components of the fare schedule. There are two fixed charges: the flag-fall charge, which applies to all taxi trips when the meter is started; and the booking fee, which is only incurred if the cab is pre-booked. There are also two variable charges. When the cab is moving at less than 20 or 21 kilometres per hour (depending on the zone) a time-based charge applies. When the cab is travelling above this speed threshold, a per-kilometre distance charge applies.
- Second, the use of surcharges during certain periods or days: These include the late night surcharge (or 'extra'), which applies from midnight to 5am in the metropolitan zones, and from midnight to 6am in the other zones, and is a percentage premium in the metropolitan zone, and fixed dollar premiums in the other zones. There is also the New Year's Eve surcharge, which applies in the regional and country zones. Surcharges are addressed in chapter 6.
- Third, multi-hire and shared hire rates: Multi-hire is where there are 6 or more passengers. Higher variable charges apply to multi-hire trips. For shared rides, where the passengers are unknown to one another, each passenger pays 75% of the metered fare at their destination.
- Lastly, the fare differentials between country and metropolitan areas: Aside from the differences in the surcharges mentioned, the fares in the regional and country areas feature a higher distance charge, with fixed charges being the same.

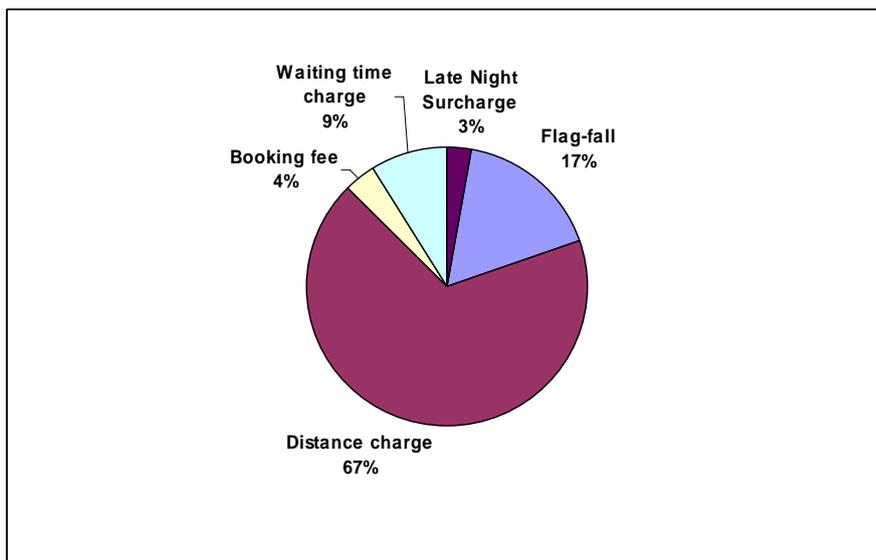
The chapter is organised around these elements as follows:

- The fixed and variable components are addressed in section 5.1. The issues that are addressed include the balance between the flag-fall charge and the per-km charge, whether taxi drivers have enough incentive to undertake short trips, and whether the tariffs are sufficiently attractive to users for longer trips. They also include whether the booking fee is adequate, and recovers all of the relevant costs including taking the cab to the passenger pick-up point, and whether the waiting time charge is at the right level.

- The surcharges are considered in chapter 6. The issues examined include whether late night surcharges are necessary, and if so whether they are consistently applied in all zones, and whether they are at appropriate levels. Also, whether time-of-use charging mechanisms should be used more extensively, for example for longer hours, weekends, or to certain holidays. Similarly, whether the New Years Eve should be applied more uniformly between zones, and whether it should apply to other public holidays.
- Shared and multi-hire rates are addressed in section 5.2. The relevant issues include whether the amount of the fare reduction for shared rides, and the calculation method, are appropriate. For HOV's, there is the question as to how many users should trigger a multi-user rate, whether the multi-user rate is at the appropriate level and whether HOV multi-user rates are sufficiently competitive with relevant alternative methods of transport.
- Lastly, country tariff premiums are examined in section 5.3. Consideration is given to whether the differentials between country and metro tariffs are at appropriate levels, and whether the prevailing differences in tariff structure between country and metropolitan areas are appropriate, or whether they should have a similar structure, or whether other structures should apply, such as a higher fixed component as suggested by the VTA.

The question of premium service surcharges is also addressed in chapter 6. The charges and/or subsidies that apply to MPTP users are also examined and discussed in chapter 9.

Figure 5.1 **Relative importance of fare components – typical taxi fare**



^a Assumptions include: 50% of all trips are booked (PwC survey); 3 minutes waiting time per trip (VTA); 15% of trips occur in the late night period (VTA); average trip distance 8.4 km (PwC survey).

Table 5.1 **Summary of Current Scheduled Fares in Victoria**

	<i>Metro & outer suburban</i>	<i>Regional urban</i>	<i>Country</i>
<i>No more than 5 passengers</i>			
Flagfall	\$3.20 when meter is started	\$3.20 when meter is started	\$3.20 when meter is started
Distance	\$1.526 per km	\$1.60 per km	\$1.64 per km
Waiting	\$0.547 per minute if the speed is below 21 km/hr	\$0.547 per minute if the speed is below 20.5 km/hr	\$0.547 per minute if the speed is below 20 km/hr
<i>Carrying 6 or more passengers</i>			
Flagfall	\$3.20 when meter is started	\$3.20 when meter is started	\$3.20 when meter is started
Distance	\$2.29 per km	\$2.402 per km	\$2.464 per km
Waiting	\$0.821 per minute if the speed is below 21 km/hr	\$0.821 per minute if the speed is below 20.5 km/hr	\$0.821 per minute if the speed is below 20 km/hr
<i>Extras</i>			
Phone booking	\$1.40	\$1.40	\$1.40
Late night surcharge/extra	20% on all charges (metropolitan zone only – midnight to 5am) \$1.40 (outer suburban zone – midnight to 6am)	\$2.80 (midnight to 6am)	\$2.80 (midnight to 6am)
New Year's Eve surcharge	–	\$5.50	\$5.50

Source: DOI Website 21/4/2008

Note: Taxi drivers are also permitted to charge certain other fees, including airport related charges (charges imposed by Melbourne Airport include \$2.00 for taxis hired from Melbourne Airport ranks and \$3.00 for pre-booked taxis from Melbourne Airport), and the pass-through of CityLink tolls.

Table 5.2 **Calculation of typical taxi fare**

	<i>Current fare components</i>	<i>Factor</i>	<i>Current fare</i>	<i>% of average fare revenue</i>
Flag-fall	3.2		3.20	17
Distance charge	1.526	8.4 km	12.82	68
Booking fee	1.4	50% of trips	0.70	4
Waiting time charge	0.547	3.0 min	1.64	9
Late Night Surcharge	20%	15% of trips	0.55	3
Total			18.91	100

Source: VTD, PwC, VTA

5.1 Fixed and variable charges

As shown in Figure 5.1, the fixed and variable components of the taxi fare together make up approximately 97% of the typical taxi fare.

The approach taken by the Commission when examining this aspect of the fare structure has been:

- to identify the issues and perspectives raised by stakeholders on this subject (section 5.1.1)
- to examine relevant research into taxi fare structures (section 5.1.2)
- to formulate an appropriate methodology for analysis (section 5.1.3)
- estimate a cost function for taxi services, and estimate the costs that are directly attributable to different service elements, and the indirect costs (section 5.1.4)
- examine the sensitivity of demand and the frequency of trips of different lengths (section 5.1.5), and
- estimate the tariff structures that are the most economically efficient (section 5.1.6).

5.1.1 Views of stakeholders

While drivers tended to support a higher relative weighting being given to the fixed components of the fare, other submitters were more equivocal, including VCOSS and the VTA.

The driver submissions included Mr Griffiths and Mr Hunt. The former stated:

I would support a modest fare increase but with the fare components rebalanced around the average fare such that shorter fares go up \$2 and longer fares go down perhaps 10%. While an \$8 flagfall would probably be indicated, the market would not bear the shock. I would say at least a \$4.50 flagfall and a \$2 booking fee.

Mr Hunt suggested:

The flagfall should be increased in weighting, such that the driver's share represents at least 20 minutes of fair income. The booking fee should be equal to 3km at the distance rate.

The VTA did not express a definite view:

The various components of taxi fares (fixed or flagfall values, variable time based values and variable distance based values) should be evaluated in terms of the way these components contribute to both the quality of service and service delivery costs. Any changes in the relative weightings should be guided by information obtained concerning customers perceptions about the supply of different services. For example if customers find there is a lack of taxis available for shorter trips, it may be necessary to increase the flagfall to increase the supply of taxis for this type of trips.

...

The current structure which weights fixed costs and two components of variable costs (time, distance) is broadly appropriate since it does reflect the costs taxi operations incur.

VCOSS highlighted similar considerations as being relevant:

Any proposed fare structure needs to ensure that sufficient incentive exists for drivers to respond to short trips. Anecdotally, taxi responsiveness to short trips is poor, especially in peak periods and in outer suburban areas. People dependent on taxis are more likely to take short trips within their local area to access shopping, health services or to engage in social activities. It is essential that fare structures contain a balance between incentivising short trips through the fixed flag fall rate while simultaneously not creating a situation where people taking short trips are paying disproportionately high fares.

At public forums some taxi drivers also supported a minimum charge.

5.1.2 Relevant research

In Australia, a relevant study of taxi tariff structures in NSW has been carried out by Booz Allen Hamilton in 2003.⁸¹ However, Booz Allen noted that there has been very little published research on taxi fare structures:

We have not been able to identify any international research that addresses this topic directly; and only able to identify one article that addresses it indirectly. It is surprising that so little research appears to be available on this topic internationally, given that

⁸¹ Booz Allen Hamilton (July 2003) 'Appraisal of Taxi Fare Structure Issues', prepared for IPART

setting the relative fare components is a common issue faced by taxi companies and regulators.⁸²

Booz Allen estimated an urban taxi cost model for NSW, in which direct costs were given by the following function: \$0.55 per 'live'⁸³ km + \$2.70 per telephone booking + \$9.60 per hour waiting time. The cost per km and the waiting time included vehicle operating costs such as fuel, as well as driver time costs. The telephone booking cost included the cost of positioning the taxi to the pick-up point, which was assumed to be 3km on average, as well as the radio call cost. Booz Allen found that:

While the cost modelling has not identified any specific flag-fall costs, some small level of costs could be identified in a more detailed appraisal, eg for pick up/set down time and for fares transactions/accounting.⁸⁴

Booz Allen found that over 60% of taxi cab operating costs are indirect costs. In regard to the allocation of indirect costs, Booz Allen noted that:

The 'classical' approach to allocating joint costs to set tariffs in a situation such as this is through Ramsey pricing, ie setting the price excess over direct costs for each component in inverse proportions to the relevant demand elasticities. While demand elasticity information is very sparse, we would expect shorter trips to be the most price elastic. This would tend to imply making the flagfall component relatively low (given its direct costs are close to zero) and recovering most of the indirect costs through the distance rate.⁸⁵

However, once again, there is very little information on taxi market demand elasticities, and even less on how elasticities might vary with trip distance (see section 5.1.5 below for further discussion of demand elasticity).

5.1.3 Methodologies

As mentioned, economic theory can provide guidance in relation to setting tariff structures. An economically efficient tariff structure is one which maximises economic welfare, which is the sum of producer surplus (industry economic profits) and consumer surplus. This depends on cost structures as well as demand characteristics.

Basic principles of economically efficient pricing include ensuring that:

- directly attributable incremental costs are recovered from each attributable user or service component, and
- indirect costs are recovered from all users or service components in a way that that least distorts demand compared to a situation where all fare components

⁸² Booz Allen (July 2003), p.5

⁸³ This refers to km travelled while the taxi is engaged

⁸⁴ Booz Allen (July 2003), p.7

⁸⁵ Booz Allen (July 2003), p.8

were equal to incremental cost for that service component (thereby maximising economic welfare).

In this approach, costs are separated into directly attributable costs and indirect costs, and the principles governing the allocation of indirect costs (i.e. to maximise economic welfare) take into account the demand conditions of the market.

VTA, at one point in its submission, suggests that the tariff structure should be referenced to costs alone, and emphasises the separation of costs into fixed and variable costs.

The methodology that is appropriate involves deriving an optimal two-part tariff that reflects the various costs involved in taxi operation. The current structure which weights fixed costs and two components of variable costs (time, distance) is broadly appropriate since it does reflect the costs taxi operations incur.

...

Larger fixed components may reduce demands for short trips but the important issue is to capture extra costs incurred.⁸⁶

The VTA appears to assume that all fixed costs are to be treated as if they were costs that are directly attributable to flag-fall⁸⁷ (and hence all variable costs would be attributable to variable fare components). This would ignore the distinction between directly attributable and indirect costs.

VTA also suggests:

*If we were to try to adopt some form of Ramsay pricing as discussed in Booz Allen Hamilton where the objective is to obtain some form of constrained optimum of social welfare we would need more accurate estimates of elasticities. This could not be done without significant further research. In the medium term we can treat pricing issues in the taxi industry as largely independent of elasticity issues if the regulatory effort is to mimic a competitive industry. The main issue is to ensure that *the industry operates efficiently and that prices reflect all relevant costs.**

The VTA has not explained how the adoption of an assumption that the elasticity of demand is equal to zero can be superior to using a reasonable and unbiased estimate based on direct research.

Potential use of quality of service indicators

An alternative approach to that taken in this report is to use detailed information on waiting times for different types of services.⁸⁸ There is an important interaction between fare structures and the quality of taxi services to the public. A relatively high distance rate compared to the flag-fall charge may make it attractive for cabs

⁸⁶ VTA submission, p.11

⁸⁷ See Booz Allen (July 2003), who identifies no directly attributable costs associated with flag-fall (p.7)

⁸⁸ These comments are influenced by Schroeter John R (1983) 'A Model of Taxi Fare Structure and Fleet Size regulation' *The Bell Journal of Economics*, Vol. 14, No. 1

to wait relatively long periods of time in airport taxi ranks due to the greater gains from the longer trips. Waiting times for customers taking cabs from the airport would be close to zero, while longer waiting times may be caused at taxi ranks with shorter average trip distances.

A relatively low booking fee may encourage taxis to queue at ranks or cruise for business, while customers booking cabs may incur substantial waiting time. If the late night surcharge is insufficient, then taxis may not have a sufficient incentive to operate at those times, and longer waiting times or unmet demand may result.

Anecdotal evidence suggests that the booking fee may be too low, leading to an inefficient emphasis on cruising and taxi rank work. For example, Mr David Griffiths stated:

If the booking fee is not increased, there is no incentive to pick-up radio jobs when street hails are plentiful.

These observations suggest that detailed information on waiting times for different types of services would be valuable information that would assist with tariff design. This is discussed further in chapter 8. The Commission has received some information from the major metropolitan taxi depots, however, this information is not sufficiently complete at the present time to enable publication of aggregate data. Therefore, this approach has not been adopted by the Commission.

5.1.4 The Cost Function

PwC's analysis of costs⁸⁹ can be used to define a cost function for the typical Victorian taxi cab. This involves identifying the costs that are directly attributable to certain services or service elements, and the remaining indirect costs.

PwC has observed that for the median taxi cab in 2007, 25% of costs were fixed or relatively fixed costs, including insurance and registration, network fees and assignment fees.⁹⁰ These totalled \$34,431. Of the remainder, driver incomes represented \$71,411; or 52% of costs. Under bailment arrangements these costs are ostensibly related to fare revenue. The remaining 23% of costs (i.e. \$30,874) may be termed 'on road' costs, and include vehicle funding or depreciation, LPG, repairs and maintenance, tyres, cleaning and miscellaneous costs. These costs depend most importantly on the total paid and unpaid kilometres driven by the cab.

The allocation of the costs for the median taxi cab in 2007 to the main service elements is shown in Table 5.3. The approach taken to the allocation of costs is now described.

Allocation of 'on road' costs

The simplest of the costs to allocate are the 'on road' costs. PwC estimated the median cab drives 116,048 kilometres a year, so the implied 'on road' costs are 27 cents per kilometre (**c/km**). Since PwC has estimated that 50% of the kilometres

⁸⁹ PwC (February 2008) 'Review of Victorian Taxi Costs'

⁹⁰ PwC (February 2008), p.24

driven are paid kilometres⁹¹, this proportion of 'on road' costs is allocated to the distance charge.

Although there remains a significant indirect cost component to 'on road' costs, some of the unpaid kilometres can be attributed to bookings and some to waiting time.

In regard to bookings, Booz Allen Hamilton suggested the typical taxi cab booking involves a 3 km journey by the taxi to the pick up point.⁹² The basis of this assumption wasn't reported. For the purpose of its analysis the Commission has adopted the assumption that there is an average 2 km journey to the pick point for each booking. This is a conservative assumption based on some anecdotal evidence of taxi drivers based on the readouts of their GPS systems.

PwC estimates that the median taxi has 6,923 jobs per year, and the survey also suggests that approximately 50% of all jobs are pre-booked. By implication, the average taxi drives $(6923 \times 0.5 \times 2 =)$ 6,923 km to pick up bookings annually, representing $(6923 \times 0.27 =)$ \$1,842 per cab, or 53 cents of 'on road' costs per booking.

Some of the 'on road' costs may also be attributed to waiting time. These costs could be calculated on the basis of the cost per minute of a taxi cab operating at 21 kmph – the point at which the charge cuts in (in the Metropolitan area). The 'on road' costs are 27 cents per kilometre, or 8.1 cents per minute at 21 kmph. Note however, that this cost allocation depends on the notion that the waiting time charge applies when the cab is operating at low speed, and on the threshold chosen. The 'on road' costs when the cab is stationary may be negligible.

Allocation of driver costs

The incomes earned by drivers are determined by the demand and supply conditions in the market for taxi drivers. Therefore, driver incomes will ultimately be governed by the minimum hourly income expectations of drivers. The following analysis allocates driver costs on an hourly basis as an approximation to actual driver allocations which are based on a revenue sharing formula.

The PwC analysis indicates that driver incomes in 2007 were approximately \$13.20 per hour.⁹³ Only approximately one third of driver time is spent with the cab engaged.⁹⁴ This implies that approximately \$23,800 of the driver costs would be directly allocated to engaged kilometres. As the median cab drove 58,024 engaged kilometres in 2007, the average driver cost per engaged kilometre was approximately 41 cents.⁹⁵

⁹¹ PwC (February 2008), p.12

⁹² Booz Allen Hamilton (July 2003) p.6

⁹³ See PwC, p.12. PwC estimates that the median taxi cab drives 472 shifts per year, and that the average weekday shift is 12 hours, and the average weekend shift is 11 hours. By implication the median cab is shifted approximately 5,530 hours per year. Total driver payments are \$71,411, or \$12.90 per hour the cab is shifted.

⁹⁴ See KPMG (1999) 'National Competition Policy review of Taxi-cab and Small Commercial Vehicle Legislation', p.83

⁹⁵ The number of hours that a cab is assumed to be engaged and the number of engaged kilometres per year imply that the average speed while the cab is engaged is 31 kmph.

Under the assumption of 2 kilometres of positioning per booking, and 3,462 bookings per cab per year, the allocation of driver costs to the booking charge is approximately ($6923 \times 0.41 =$) \$2,840 per cab, or 82 cents per booking. There is also the allocation of driver costs to the waiting time charge, which is based on the driver's hourly rate of \$13.20 per hour, or 22 cents per minute.

The remainder of driver payments (i.e. \$40,300) are indirect costs, which represent 56% of total driver payments. Note that there are no costs directly attributable to the late night surcharge period because driver hourly costs are allocated on a uniform basis over all hours of all shifts worked.

An alternative approach would be to use an external benchmark for driver income per hour for application when the cab is engaged. Under this approach the implicit cost of driver time when the cab is not engaged would be lower.

Allocation of fixed costs

Not all fixed costs are indirect costs. According to IPART⁹⁶ all of the network fees paid by the taxi operator would ideally be directly attributable to bookings. IPART estimated this to be \$4.20 per booking in NSW. PwC's analysis of Victorian taxi operating costs found that network fees represented approximately \$6,739 for the median cab in 2007. This represents \$1.95 per booking.

On the other hand, Booz Allen⁹⁷ attributed only the radio call cost component of \$1.05 per booking⁹⁸. In the Commission's preliminary view, in Victoria, network fees may contain a component of 'monopoly rent' because in most localities there is only a single taxi network, and in the greater part the metropolitan area there are only two competing networks. The networks also have a number of other functions aside from booking and despatch such as monitoring driver safety. Booz Allen's estimate of the radio call cost of \$1.05 per booking appears to be consistent with an indicative estimate of the average cost per booking of the call and despatch centre functions of the networks, based on available information on staffing, and hourly rates for call centre staff. Due to the rapid technology advances in call centres, the average radio call cost per booking is unlikely to have increased significantly since 2003. Hence the Commission has used the Booz Allen estimated cost of \$1.05 per booking, which represents \$3,635 per annum per cab.

The remainder of fixed costs, including its greatest part – licence assignment fees – are all indirect costs amounting to \$30,796.

⁹⁶ IPART (February 2008) '2008 Review of Taxi Fares in NSW' pp. 31-32

⁹⁷ Booz Allen Hamilton (July 2003) p.7

⁹⁸ Booz Allen estimated the costs directly attributable to the booking service for a Sydney cab in 2003 to be \$2.70 per booking. Out of this, the cost of repositioning the cab was \$1.65 (i.e. 55 c/km). The remaining \$1.05 represented the radio call cost. See Booz Allen Hamilton (July 2003) 'Appraisal of Taxi Fare Structure Issues' (prepared for IPART) pp. 6-7.

Table 5.3 **Taxi cab cost allocation**

	<i>Total cost per cab</i>	<i>Directly attributable costs</i>				<i>Total directly attributable costs</i>	<i>Indirect costs</i>
		<i>Flag-fall</i>	<i>Distance</i>	<i>Booking</i>	<i>Waiting</i>		
Fixed costs (\$)	34,431	-	-	3,635	-	3,635	30,796
Driver payments (\$)	71,411	-	23,804	2,840	4,465	31,109	40,302
'On-road' costs (\$)	30,874	-	15,437	1,842	1,013	18,292	12,582
Total (\$)	136,716	-	39,241	8,316	5,478	53,035	83,681
Frequency per cab / yr		6,923 trips ^a	58,024 paid km ^a	3,462 bookings ^b	20,769 min ^c		
Directly attributable cost		0	68 c/km	\$2.40 per booking	26 cents per min.		

^a PwC estimates for the median taxi in 2007

^b Assuming 50% of jobs are pre-booked

^c Assumes 3 minutes of waiting time per job

Sources: PwC survey results (total costs per cab), ESC estimates (allocated costs)

As Booz Allen has previously noted, there does not appear to be a significant amount of costs that are directly attributable to flag-fall. Usually this fee is described as covering transaction costs at the end of a trip, but these costs are presumably relatively small given that Booz Allen was unable to quantify them within the scope of its study. In the present analysis, the flag-fall charge is regarded as simply a means of recovering part of the indirect costs. The appropriate amount of the flag-fall will depend on the relative efficiency of recovering indirect costs through the flag-fall charge or through other fare components such as the distance charge.

5.1.5 Analysis of demand characteristics

This section examines the available data on demand elasticity and trip-length profiles which are used in the analysis of alternative tariff structure options.

Demand elasticity - relevant published studies

There is limited available analysis of taxi demand and price elasticity for taxi services in Victoria, although some studies have been carried out in other jurisdictions.

In a survey analysis of modal choice in Canberra, Booz Allen Hamilton found an average taxi demand elasticity of -0.36 over all taxi users. This average was derived by assuming a demand elasticity of zero for all customers using a company charge card. The demand elasticity for users not on-charging fares to a third party was found to be -1.41. The survey excluded evening and night travel. Booz Allen

suggested that it expected evening and night travel users to be less elastic than the average paying user.⁹⁹

In a study undertaken for IPART, Booz Allen surveyed a number of overseas studies, the most substantial of which suggested that the taxi demand elasticity may be around -0.8 .¹⁰⁰ Some other overseas studies not referenced by Booz Allen, such as Schroeter (1983), also support an estimate for the demand elasticity of approximately -0.8 .¹⁰¹ However, Booz Allen considered that in Australia, demand for taxi services would be less elastic and suggested a most likely range of -0.3 to -0.8 .

Commission's preliminary analysis of journey-to-work data

The Commission has undertaken a limited analysis of demand elasticity. The analysis uses the ABS Census data for Journeys-to-Work in 1996, 2001 and 2006. This data is for journeys within and between Statistical Local Areas (SLAs) within the metropolitan area. DOI provided information on the average journey distances between and within SLAs for car journeys in the metropolitan area. The details of this analysis are described in Appendix E.

A key limitation of the analysis is that it is confined to taxi journeys to work. To the extent that demand characteristics for users of taxis for this purpose are not representative of the entire market, then the results will also not be representative.

The estimated price elasticity of taxi demand for taxi services from this analysis is -0.5 . This estimate falls within the range suggested by Booz Allen Hamilton for the NSW market of -0.3 to -0.8 . A model was tested in which the elasticity of demand varies with the distance of the trip. It was found that demand is less elastic for longer trips and more elastic for shorter trips (see Table E.3 in Appendix E). However, this relationship of demand elasticity to trip distance was not found to be significant at a 95% degree of confidence. For this reason, the constant elasticity model is preferred.

The Commission's analysis in Appendix E is limited in terms of both the depth of analysis undertaken (testing only two econometric specifications) and data (covering only one section of the market). Furthermore, the data available is not extensive enough to support an analysis of whether the demand elasticity varies between different types of user, or different types of trips. Therefore, while this analysis contributes something further in relation to information on the demand elasticity of taxi services in the Victorian taxi market, it is not conclusive. There remains a wide range of uncertainty about demand responses to changes in taxi fares.

However, as the findings are consistent with the findings of Booz Allen Hamilton (in relation to NSW), the indicative range of -0.3 to -0.8 appears to be relevant to Victoria. The ends of this range, and the estimate of -0.5 , are used in the Commission's taxi fare analysis.

⁹⁹ *ibid.*, p.13

¹⁰⁰ This estimate came from: Frankena M.W. and Pautler P.A. (1984) 'An economic Analysis of Taxicab Regulation'

¹⁰¹ Schroeter John R (1983) 'A Model of Taxi Fare Structure and Fleet Size regulation' *The Bell Journal of Economics*, Vol. 14, No. 1, pp. 81-96

Frequency profiles of trip distances

DOI has prepared and provided information on trip length profiles for day and night shifts from the Victorian Activity and Travel Survey (**VATS**) for 1994 to 1999. The data is presented in more detail in Appendix D.

While the VATS database is now dated, it is the most comprehensive source of trip-length information that the Commission is aware of at the present time for the Victorian taxi market.¹⁰² The Victorian Integrated Travel and Activity Survey (**VISTA**), which is currently underway, will provide comparable current information when completed in mid-2008.

The VATS data only includes residential travel trips. It does not include tourist trips and some, or most, corporate travel. The average number of residential taxi trips in the VATS database for 1994 to 1999 is 16 million per annum, which is believed to represent approximately 70% of the total demand for taxi services in Victoria in that period¹⁰³.

Table 5.4 shows a summary of the proportion of taxi trips in each distance range, together with the average trip distance in each range, from the VATS database.

Table 5.4 **Residential taxi trips per day by distance** (average 1994 to 1999)

<i>Trip length (km)</i>	<i>Day</i>		<i>Night</i>		<i>Total</i>	
	<i>% of trips</i>	<i>Avg. dist. (km)</i>	<i>% of trips</i>	<i>Avg. dist. (km)</i>	<i>% of trips</i>	<i>Avg. dist. (km)</i>
0 - 1.9	16.5	1.2	8.1	1.2	12.4	1.2
2 - 4.9	33.4	3.3	31.2	3.5	32.4	3.4
5 - 9.9	26.3	6.8	29.6	7.3	27.9	7.1
10 - 14.9	8.2	11.8	15.1	12.0	11.6	11.9
15 - 19.9	4.2	17.8	6.0	16.9	5.1	17.3
20 - 24.9	3.1	22.9	3.3	21.5	3.2	22.2
25 - 29.9	3.4	26.7	3.6	27.3	3.5	27.0
30+	4.8	46.6	3.0	42.1	4.0	44.9
Total	100.0	8.6	100.0	9.1	100.0	8.8

Source: DOI, VATS

The use of the VATS database for the analysis in this report is based on the assumption that the relative composition of taxi trips in terms of distances travelled may have remained relatively stable since the 1990's. This assumption is

¹⁰² The ABS Census data for journeys to work is narrower as it applies only to one trip purpose.

¹⁰³ KPMG estimated the number of taxi trips in Victoria in 1998 to be 22.4 million. See KPMG (1999) 'Department of Infrastructure: National Competition Policy review of Taxi-cab and Small Commercial Passenger Vehicle Legislation', p.27

supported by the taxi trip-length profiles from the ABS Journey to Work data for 1996, 2001 and 2006, as discussed in Appendix D.

5.1.6 Discussion of the fare components

This section examines and attempts to quantify the optimal tariff structure, based on the foregoing information on the cost structure and the profiles and price-sensitivity of demand for the relevant segments of the market.

In order to do so, it is first necessary to examine the basis of the waiting time charge and the booking fee. The balance between the flag-fall charge and the distance charge can then be assessed based on the principles of maximising welfare subject to maintaining revenue neutrality.

Waiting time charges

In the metropolitan area, the waiting time charge applies when the taxi-cab is operating at less than 21 kmph. In the regional and country areas it applies when the cab is operating at less than 20 kmph. This threshold speed determines the relativity between the waiting time charge and the distance-based charge (i.e. 21 kmph ÷ 60 minutes = 35% of the distance charge).

In a number of other jurisdictions the waiting time charge only applies when the cab is stationary. The relativity of the waiting time charge to the distance charge ranges from approximately 25% in South Australia to almost 50% in Western Australia. Victoria lies within the range defined by the other States and Territories.

In NSW, the threshold speed for the waiting time charge is 26 kmph. IPART has suggested that the waiting time charge in NSW appears to be higher than the applicable direct costs, which would be equivalent to a threshold of around 12 kmph.¹⁰⁴ If the waiting time charge for Victoria is calculated as a percentage of the distance charge – as implied by a kmph threshold – then at a threshold of less than approximately 11 kmph, the waiting time charge would not recover the directly attributable costs (which are partly dependent on the threshold adopted).

The approach proposed by the Commission for this Review is to allow the waiting time charge to be used to recover part of the indirect costs. Therefore, the threshold speed must be adopted initially, however arbitrarily, and then the directly attributable costs can be calculated (as was the approach in section 5.1.4). If the waiting time charge is 35% of the distance charge (as implied by a 21 kmph threshold), then both charges will exceed the directly attributable costs and recover some indirect costs (although the recovery of indirect costs will be proportionately greater from the distance charge at the current level of the distance charge.)

The question as to the appropriateness of the current waiting time threshold speed in Victoria has not been raised by stakeholders, and the Commission has no reason to believe it is inappropriate.

In Melbourne and Sydney the application of the waiting time charge when the cab is travelling slowly is likely to be a relatively important consideration in a city where traffic can become congested on major arterials. Under the regulations¹⁰⁵ the hirer

¹⁰⁴ IPART (February 2008) '2008 Review of Taxi Fares in NSW – Issues Paper', pp.32-33

¹⁰⁵ s.29, Transport (Taxi-Cabs) Regulations 2005

of the taxi cab can direct the driver as to the route to be taken, and therefore should carry some of the congestion risk. Hence it is legitimate that a time-based charge should apply when the cab is moving slowly. On the other hand, the customer often relies on the driver to choose the route, so a waiting time charge that is too high might expose the customer to potential additional costs associated with poor route selection. As the Commission has had no submissions in relation to the appropriateness of the current waiting time charges, it is not in a position to form a view on whether there is any inefficiency in the balance established between the waiting time thresholds and the distance charge.

Overall, the current relativity of the waiting time charge to the distance charge in the metropolitan area in Victoria (i.e. 35%) appears to be reasonable, based on comparisons with other jurisdictions and relative to the directly attributable costs. However, for reasons of simplicity, there appears to be merit in having a uniform speed threshold between the metropolitan, outer suburban, regional and country zones of Victoria – such as 21 kmph.

An alternative method of structuring the taxi tariff is to have a time-based charge that applies whenever the taxi is engaged, and a commensurately lower distance charge, which also applies at all speeds. However, the comparative economic efficiency of this fare structure cannot be readily analysed, and it may have additional implementation costs if significant changes are needed in reconfiguring meters.

Preliminary conclusion:

In all zones, metropolitan and country, the waiting time should consistently apply when the vehicle is operating at less than 21 kmph, and the waiting time charge should be calculated as 35% of the applicable distance based charge.

Booking fees

The booking fee only applies when the taxi is pre-booked, and it can apply when the cab is pre-booked privately or through a network.

There are some significant differences between jurisdictions in phone booking fees. In Western Australia (\$1.00), Queensland (\$1.10), Victoria (\$1.40) and NSW (\$1.60) the phone booking fees are broadly similar, while in the ACT there is no booking fee.

The directly attributable costs were calculated to be \$2.33 per booking. This is significantly higher than the current phone booking fee. An efficient fare structure requires that each fare component be no lower than the directly attributable costs, which implies that a significant increase in the booking fee would be appropriate. For some services, such as wheelchair bookings, or country localities, the average amount of 'dead running' to a pick-up a booking may be higher. In those instances there is a case for an additional charge. These questions are considered in section 5.3 in relation to negotiable country fares, and in sections 9.2 in relation to wheelchair lifting fees.

As a general principle, the Commission does not favour the calculation of charges to the user based on the actual distance covered by a cab to reach a specific customer's pick up point, as this would remove the incentive for drivers to efficiently position the cab between jobs so as to minimise the travel distance to

bookings. Instead the booking fee should be based on a standardised notional distance, which represents a minimum distance if the taxi fleet operates efficiently in positioning cabs between jobs. Therefore, the Commission's preliminary recommendations for the booking fee are based on a standard or average repositioning cost.

In addition to these calculated directly attributable costs, the booking fee should also compensate for certain revenue risks associated with bookings. Mr David Griffiths noted:

When there is a backlog of jobs the computer will send you to the oldest first, these often are not there and you waste your time getting "no job" after "no job".

Therefore, the estimated directly attributable costs are a conservative estimate, which is likely to understate the level of the booking fee that would provide efficient incentives for cab drivers.

IPART has raised the issue as to whether the booking fee needs to be regulated, as there is potentially more contestability between cabs in the pre-booked market (as customers can ascertain the price and ring alternative providers to get the best price). However, IPART also argues that deregulation of the booking fee would not be advisable where there is limited competition between networks.¹⁰⁶ It is the Commission's conclusion that in Victoria, the taxi fare schedule in the pre-booked market should be a maximum fare schedule only – so that taxi firms can establish their own fare schedules for pre-booked services in which some or all charges are lower.

A further issue relates to how the booking fee is implemented through the taxi meter. Mr Griffiths noted that:

As many drivers are illegally adding the booking fee to every job they pick up, this needs to be integrated with the radio, so that the booking fee can only be added to a radio job.

It is in the interests of taxi users and the industry, as well as being consistent with the regulations, that drivers may not charge a fare other than the scheduled fare.

Preliminary conclusion:

The booking fee should at least cover the directly attributable costs of servicing a booking, which the Commission conservatively estimates to be \$2.40 per booking. As there are some other disincentives relating to bookings, the Commission recommends that the booking fee be increased to a level slightly higher than the estimated directly attributable costs.

There may be merit in exploring whether the taxi meter should be integrated with the despatch systems of primary or secondary networks, so that the booking fee can only be added to the meter for pre-booked hires.

¹⁰⁶ IPART (February 2008), p.32

Flag-fall & distance charges

The key elements of the taxi fare are the fixed flag-fall charge and the variable distance charge. This fare structure differs from Melbourne's public transport fares, which are higher for movements from an inner to an outer zone, but within a zone they are 'postage stamp' prices that do not vary with the distance travelled.

A key purpose of the flag-fall charge is to provide sufficient incentives for drivers to undertake short trips and to efficiently recover indirect costs from users. Short trips will remain an important source of revenue to taxi drivers since, as shown in Table 5.3, trips of less than 5 km account for almost 45% of all taxi trips, and trips of less than 2 km account for approximately 12% of taxi trips. Furthermore, it has been observed that demand is likely to be more price-sensitive for shorter trips than for longer trips, although this effect is not statistically significant in the data examined.

These observations suggest that excessive use of fixed charges would impose a risk to revenue. An important consideration in setting the relevant levels of the flag-fall and the distance rate is to ensure that short trip users are not priced out of the market given the importance of these trips in overall taxi use.

Sometimes a multi-part tariff can be useful, which provides for the distance rate to be lower for longer classes of trips, encouraging efficient utilisation of taxis for longer trips. As it is assumed the demand elasticity is constant for trips of different length, this option was not found to be an improvement.

There is no available information on whether and by how much the proportion of taxi trips that are pre-booked will be affected by changes in the booking fee relative to changes in other charges, such as flag-fall. Without this information, it must be assumed that the percent of trips that are pre-booked remains constant at 50%. In effect, the fixed charge per trip at current charges is \$3.90 (i.e. the flag-fall charge and 50% of the booking fee).

For comparison, the current price of a two hour Met ticket for the inner zone is \$3.50 (non-concession) and the City Saver (a key market for taxis) is \$2.60.

The Commission has used the information on the trip-length profiles, and demand elasticity presented in the previous section, as well as the cost function information presented earlier, to calculate the consumer and producer surplus associated with alternative tariff structure options. An algorithm¹⁰⁷ is employed to find the optimum mix of flag-fall and distance-based charge, subject to overall revenue neutrality, and given certain principles proposed for setting the minor charges. Specifically, the booking fee has been set equal to the flag-fall charge (as this is only slightly higher than the directly attributable costs of a taxi booking) and the waiting time charge is calculated from the distance charge at the ratio 21:60. The Late Night Surcharge is unchanged at 20%.

Table 5.5 shows the estimated daily social welfare (i.e. consumer plus producer surplus) under the current tariff structure of \$1.67m. Note that this welfare calculation represents approximately \$600m per annum.

In the second row of Table 5.5 the welfare maximising tariff is calculated. Notably, this revised tariff does not improve calculated welfare. This is likely to be partly due

¹⁰⁷ The Solver tool in Excel is used.

to the constant demand elasticity assumption and partly due to the revenue neutrality constraint. Taken together, these assumptions will imply that only incremental improvements in welfare could be achieved by changing the tariff structure.

The proposed alternative tariff structure involves an increase in the booking fee to ensure that it exceeds the directly attributable cost of booking. As a result other charges must decrease to maintain revenue neutrality. Although there is a small reduction in the distance rate, the principal adjustment is to the flag-fall charge. This is decreased by approximately 60 cents, which is approximately half of the increase in the booking fee of roughly \$1.20. This relativity corresponds to the proportion of taxi trips that are pre-booked.

Table 5.5 **Current and modified taxi fare structures**

	<i>Flagfall</i> (\$)	<i>Distance</i> Rate (\$/km)	<i>Waiting</i> (\$/hr)	<i>Booking fee</i> (\$)	<i>Late Night</i> Surcharge"	<i>Welfare</i> (\$m / day)
Current Fare	3.20	1.53	32.82	1.40	20%	\$1.67
Rebalanced flag-fall & distance charge, booking fee = flag-fall	2.57	1.48	31.00	2.57	20%	\$1.67

Source: ESC

The main results of this analysis can be summarised as follows:

- Variations in the charges were found to result in only minor changes to the calculated economic welfare, given the assumptions employed in the model.
- The distance based charge was found to be at approximately the appropriate level.
- The option of a 'two-tier' distance charge was tested, but the optimal distance charges for each tier were found to be similar. Therefore a single distance charge seems to be appropriate, based on the assumptions used.
- Overall the main effect of increases in the booking fee from \$1.40 to \$2.57 as to reduce the flag-fall fee. This was the primary adjustment that occurred to ensure overall revenue neutrality.

It is also notable that because, if the demand elasticity varies with distance, it is more likely to be relatively elastic for shorter trips and less elastic for longer trips, and for this reason a minimum charge may have a pronounced demand response, and hence be an unattractive option.

Preliminary conclusions:

The tariff structure should be modified in the following ways:

- The flag-fall charge to be reduced to \$2.60, which is approximately 80% of its present level, and the booking fee to be increased to equal the flag-fall charge***
- The distance charge be retained at its present level.***

5.2 Multi-user & shared hire rates

The multi-user and shared-ride tariffs include:

- Higher distance charges and waiting charges apply when a taxi-cab is carrying six or more passengers. This is relevant to high occupancy vehicles. The distance rate is 50% higher than when carrying five or fewer passengers.
- Multiple hiring rates apply when two or more unacquainted people take a taxi from the same origin to destinations along the same route or direction.

5.2.1 High occupancy rates

In a letter to the Director of Public Transport the VTA proposes that the high occupancy hiring tariff should apply when there are 5 users (or 2 wheelchairs), rather than 6 at present. This is because newly licensed conventional cabs are only permitted to carry a maximum of 4 passengers.

In the Commission's preliminary view, high occupancy taxis should be able to charge the high occupancy tariff whenever they are carrying more passengers than the maximum limit for a conventional cab. This is because when a HOV is carrying more than 4 passengers, the passengers are obtaining a benefit from the operator's additional investment in a HOV vehicle. This change in the fare structure will improve the returns to HOV operators, and encourage investment in HOVs. As HOVs are accessible vehicles, it will also support the use of WATs, and therefore assist the industry to meet the Disability Standards.

The same argument suggests that it is also reasonable for the high occupancy tariff to apply whenever two wheelchair passengers are using a taxi at the same time.

Preliminary conclusion:

The high occupancy hiring tariff should apply when there are 5 users, or 2 wheelchair users.

5.2.2 Shared rides

Where there is multiple hiring of a cab by two or more unacquainted people travelling in the same general direction from a common starting point – then each hirer will pay a fee no more than 75% of the metered fare at their destination. This is the same as in Queensland and Western Australia.

This rate is used in peak times from venues where multiple use provides for an efficient use of taxis. However, there is a significant degree of dissatisfaction with

this tariff. It clearly benefits drivers who obtain a significantly higher fare than they would if they carried only a single customer. Dissatisfaction emanates particularly from the passengers that are dropped off last, because the taxi may detour during the journey, adding to both the distance charges and the overall trip time. Payment by customers of 75% of the total metered fare at their destination may not represent an attractive discount. The overall user cost, when detours and delays are taken into account, may be higher than when not sharing a cab.

Presumably for this reason, shared-rides are not widely used:

it is in my experience less than once a month I can take advantage of it. However passengers are frequently uncooperative, and greedy drivers don't know how to use it. You have to be flexible and give win win, cheaper for the passenger and more for the driver. Driver's can get trip estimates from the query operator who uses the base computer, so possibly a GPS device in the cab could give the fare and also calculate the share fare.¹⁰⁸

Since passengers will normally have the option of taking a non-shared ride at the metered tariff, there does not appear to be a compelling reason to have a regulated charge for the shared-ride trip. The taxi driver should be able to freely negotiate shared-ride rates. However, if a negotiated rate is used, then the respective rates applying to each passenger should be agreed by them at the commencement of the trip.

Preliminary conclusion:

The multiple hirer tariff should be de-regulated. However, the respective rates applying to each passenger should be agreed by them at the commencement of the trip.

5.3 Country fare structures

Under the current Victorian fare structure for country taxi services, a higher distance charge applies, compared to metropolitan areas, but the flagfall and phone booking fees are the same. Similarly, the Regional Zone has a distance charge intermediate between the metropolitan and country charges, but the flagfall and booking charges are the same.

The fares are negotiable for trips that commence or finish outside an 80 km radius from the principal post office in the taxi operating area. However, the hiring rate must be agreed by the hirer or intending passenger prior to commencement of the hiring.

For trips that both commence and finish outside the taxi operating area, an additional (non-metered) amount can be charged 'representing a hiring rate from the boundary of the operating area to the pick up point'¹⁰⁹. In other respects the metered fare applies. Again, the additional amount must be agreed by the hirer, or intending passenger, at the time of making the booking.

¹⁰⁸ Mr David Griffiths submission

¹⁰⁹ Victorian Country Taxi Industry review Working Group (May 2006), p.8

5.3.1 Views from submissions

The VTA expressed the view that:

The fixed component of fares (currently identical between Metropolitan and Country areas) should be distinctly higher in country areas reflecting the higher fixed costs.

It also indicated that with respect to the level of country fares relative to metro fares:

The primary issue is to make fare relativities reflect cost relativities in the different locations.

There were a wide range of views expressed in the public forums conducted in country areas. These included:

- consistent with the Country Taxi Review, many drivers and operators expressed the marginal nature of taxi operations in some country areas
- there was concern about government subsidies in particular, and specifically about the equity of wheelchair lifting fees paid to country operators compared to metropolitan service providers (see section 9.2 of this report)
- the fare structure was not considered to adequately cater for the fact that country taxi drivers have more 'dead running' to reach a booking.
- consideration should be given to a minimum fare.

Taxi operators also expressed concern about the impact of price increases on demand.

5.3.2 Discussion of tariff structure issues

The rural taxi industry differs from the metropolitan taxi market in several important respects. Individual taxi operators and drivers are much more dependent on repeat business in the smaller local markets. Thus a strong incentive exists to ensure services are provided efficiently, and customer complaints are dealt with effectively. The Country Taxi Review has highlighted that in smaller country towns, taxi services are only marginally viable, and hence may have relatively little ability to exercise market power.

With regard to the balance between the fixed and variable components of the fare, it is important to take into account the fact that the great majority of taxi trips in country areas are pre-booked, and that the typical taxi trip in country areas is shorter than in the metropolitan area – around 7 km on average.

The Country Taxi Review found that approximately 70% of trips made were within the licence operating area of country taxi operators, with the remaining 30% being trips to a nearby town. This indicates that variations to the fares that can apply outside the operating area are likely to be important.

Another question of importance in relation to country taxi fares is whether the overall level of taxi fares in country areas compared to the metropolitan area is appropriate.

Balance between fixed and variable charges

The variable component of the country taxi fare is currently 7.5% higher than the metropolitan variable charge, and in the Regional Zone it is 4.8% higher. The waiting time charge is the same between the zones, and in consequence the threshold speed below which the waiting time charge applies differs between the zones.

The Commission has indicated its preliminary view that it would be simpler for the threshold speeds to be equivalent, and for the waiting time charge to be proportionate to the distance charge.

The Commission has also indicated its preliminary conclusion that the booking fee should increase to be equal to the flagfall charge, with the latter to be 80% of its current level. By implication the fixed charges associated with a pre-booked service would be higher than their combined current level. This change in the tariff structure will significantly increase the fixed charges for country taxi trips, since over 90% of these trips are booked¹¹⁰.

In addition, there is also the question of rebalancing the fixed and variable charges in country areas. There is no apparent rationale to the current practice of applying all of the relative increase in the country fare to the distance charge. VTA has questioned whether this approach is based on costs. In the absence of any cost causation behind this approach, the Commission's preliminary conclusion is to rebalance fixed and variable charges in country tariffs so that they have the same relativity as in the Metropolitan area.

The Commission considers that these adjustments address the issues raised by stakeholders, such as the VTA, relating to the balance between fixed and variable charges in country areas.

Negotiable fares beyond zone

In country towns and cities, taxi services have a defined taxi operating area which extends to a perimeter around the town boundary¹¹¹. Trips outside this boundary, or some conveniently defined zone, can result in additional 'dead running' for taxis.

There is limited permission for negotiable fares for certain trips with origins and destinations outside the taxi operating zone, or for trips greater than 80 km. However, these rules do not appear to address all of the circumstances when extra costs may be incurred. Specifically they don't cover circumstances when a taxi operator may be called upon to pick up or drop off a customer from outside the operating zone. The (negotiable) additional charge only applies if both the pick-up point and destination are outside the zone, or if the pick-up point is inside the zone and the destination is more than 80km from the centre of the zone. Situations where a customer is to be picked up outside the zone and taken to a destination inside the zone, and trips of less than 80km from a point inside the zone to a point outside the zone, are not covered.

¹¹⁰ Victorian Country Taxi Industry review Working Group (May 2006), p.7

¹¹¹ Taxi operating areas vary between localities.

For comparison, in NSW there is a Tariff II distance rate in country areas, which applies to trips over 12 km. It is 74 c/km higher than the standard distance rate and only applies to the kilometres travelled in excess of 12 km.

The scheme in Victoria could be modified by:

- taking into account all of the circumstances where all or part of a taxi trip may be outside the normal taxi operating zone, and
- having regard to the estimated directly attributable distance-related costs of 68 c/km.

Preliminary conclusions

Where a customer is to be picked up or set down outside the normal operating zone of a country taxi operator (to be defined), the taxi fare should be negotiable, and agreed to by the hirer before the trip commences. This could be in the form of a positive or negative adjustment to the metered taxi fare, or an agreed up-front amount. If it is an agreed adjustment to the metered fare, the following maximum adjustment should apply:

- if a customer is to be picked up outside the zone and driven to a point inside the zone, a surcharge of 68 c/km can be charged for each km between the zone boundary and the pick-up point.***
- if a customer is picked-up outside the zone is driven to a destination outside the zone then a surcharge of 68 c/km could be charged for each km between the zone boundary and the pick-up point, and for each km between the destination point and the zone boundary, and***
- a customer picked up inside the zone is driven to a point outside the zone then surcharge of 68 c/km could be charged for each km between the zone boundary and the destination point.***

5.3.3 Adequacy of the fare premium

Table 5.6 shows the fare calculated for a 7.7 kilometre trip during weekday daytime hours in each jurisdiction and region. Victorian country taxi fares are approximately 4.9% higher than metro fares when using a 7.7 km trip for comparison. This relativity is broadly similar to NSW, but is a smaller fare differential than in some other states. The percentage difference between Victorian country and metropolitan taxi fares would be slightly lower if calculated on the basis of a shorter trip distance.

Table 5.6 **Average Fare for 7.7 km trip**

<i>Jurisdiction</i>	<i>Metro</i>	<i>Regional</i>	<i>Country</i>	<i>% diff. Regional & Metro</i>	<i>% diff. Country & Metro</i>
Victoria	\$17.99	\$18.56	\$18.87	3.2	4.9
NSW	\$20.69	-	\$21.55	-	4.2
QLD	\$18.92	\$19.61	\$18.92	3.7	0.0
WA	\$17.13	-	\$23.02	-	34.4
SA	\$15.44	-	-	-	-
Tasmania	\$17.27	-	\$16.96	-	-1.8
ACT	\$18.88	-	-	-	-
NT	\$16.31	\$18.35	\$17.24	12.5	5.7

Note: Assumes a booked taxi service based on day-time rates with 3 minutes waiting time. Tasmania Country is deemed to include any area other than Hobart, Launceston, Burnie, Devonport, Ulverstone, King Island and Flinders Island. NT Regional is deemed to be Alice Springs. NT Country is deemed to be Katherine.

Cost comparison between Metropolitan and Country Zones

The cost pressures facing country taxi operators are markedly different from their metropolitan counterparts – as shown in Table 5.7. PwC's analysis of the 2007 survey responses indicates that the total annual costs for an average country taxi are similar to the costs for a metropolitan taxi. However, the country taxi is typically obtaining lower revenue than a metropolitan cab (due to lower trip volumes and often shorter distance trips), notwithstanding the higher fare in country areas.

Table 5.7 **Taxi Operator Costs – Metro & Country (\$ per taxi)**

	<i>Metro^a</i>	<i>Regional^a</i>	<i>Country^a</i>
Driver payments	71,617	76,830	67,080
Vehicle lease payments	6,648	6,652	6,688
Licence assignment fees	24,055	15,340	22,412
LPG	12,079	12,365	14,144
Network fees	6,247	10,000	9,000
Repairs/maintenance/tyres	8,261	9,269	10,433
Registration & insurance	4,479	3,750	2,916
Office & other	3,208	3,195	4,650
Total Cost	136,595	137,401	137,323
Revenue	143,235	153,660	134,160
Operator margin (% of revenue)	4.6%	10.6%	-2.4%
Combined licence fee & margin	21.4%	20.6%	14.3%

^a "Metro" here refers to the Metropolitan and Outer Urban zones; the "Regional" zone encompasses Geelong, Ballarat and Bendigo; while "Country" refers to all other cities and towns with taxi services in Victoria.

Source: PwC 2007 survey results

Comparing the costs of country and metro cab operators derived from the PwC survey, some of the main findings were:

- Contrary to the usual assumption, taxi licence costs reported to the survey for country operators were found to be broadly similar to metro levels. This is discussed further below.
- Overall some costs are lower outside of Melbourne – such as insurance.
- Other costs such as network and administration costs are somewhat higher, suggesting economies of scale in fleet management costs and overheads. Repairs/maintenance/tyres are also higher, possibly due to transport costs from Melbourne or due to there being less choice of provider.

Although country taxis are also usually believed to cover considerably less paid kilometres than metro cabs, the PwC survey did not bear this out. Fare revenue per cab was found to be higher in the major regional centres (i.e. Geelong, Ballarat and Bendigo), but in other country areas they were approximately 7% lower than for metro cabs. Drivers obtain a correspondingly lower income.

Taxi operators participating in the survey were found to obtain a much lower operating margin in country areas – on average -2%, compared to 5% in metro areas. On the other hand, the PwC survey found taxi operator margins in the major regional centres to be higher than metropolitan margins.

The finding that taxi operator margins in country areas are slightly negative needs to be considered against the observation that in country areas 'the majority of taxis are operated by the Licence Holder – country taxis are typically not assigned to a

third party'¹¹². Thus the 'licence assignment fees' in this case are actually returns to the taxi operator. These taxi operators will usually have invested in their licence, but it is not possible to separate the return on the licence and the return to the taxi operations. This appears to be the reason why licence fees appear to be surprisingly high in the country and operating margins low. They have in effect been consolidated under the heading 'licence assignment fees'.¹¹³

Table 5.7 shows that for the average country cab, the combined licence assignment fee and operator margin as a percent of revenue was approximately 14% in 2007.

As previously mentioned, in the metropolitan market, the market value of licence assignment fees should adjust to absorb or reflect changes in the cost base of operators. This process will ensure that licences are always assigned and that the supply of taxis would not be reduced when an operator exits the market. However, the same mechanism may not be active in all country locations, particularly as country taxi cab operators are also typically the licence holder. There is a greater risk that a scaling back of operations, or the exit of an operator entirely, could reduce the availability of taxi services. Additionally, some country towns have fewer employment opportunities and in some cases people have purchased taxi plates and then undertaken driving services as a means of obtaining rural employment whilst at the same time procuring a tangible asset.

The impact on users of service availability

The 2006 Country Taxi Review expressed concern about the financial viability of operators in rural and regional Victoria in towns where small population sizes (and thus limited demand) have an impact on operating revenue. The Country Taxi Review calculated that the minimum population size required to generate sufficient returns to operators was 2,500. On this basis, the Country Taxi Review concluded that 34 towns served by taxis fell below this threshold, and that the firms operating in those communities would likely be financially marginal. Were those towns to lose their taxi operators, it is improbable that they would be replaced. The risk that such communities might not have any form of public transport must be a concern.

While the viability of regional taxi operations is an important consideration, the impacts of a significant fare increase for regional taxi services will impact on taxi users and in some localities may result in a reduction in total fare revenue. That is, the affordability of taxi services needs to be considered.

The market for taxi services in regional areas differs in the function that taxis perform and the regulatory framework that is appropriate. There is a relatively greater degree of dependency on taxi use by some users without other forms of transport available. Furthermore, the Country Taxi Review found that 24% of country taxi users are MPTP members.

¹¹² Victorian Country Taxi Industry Review Working Group (May 2006) 'Final Report: Country Taxi Review', p.7

¹¹³ This view is supported by presentations at the Bendigo public forum on 19 February 2008, at which information was presented on taxi operator costs for a country operator.

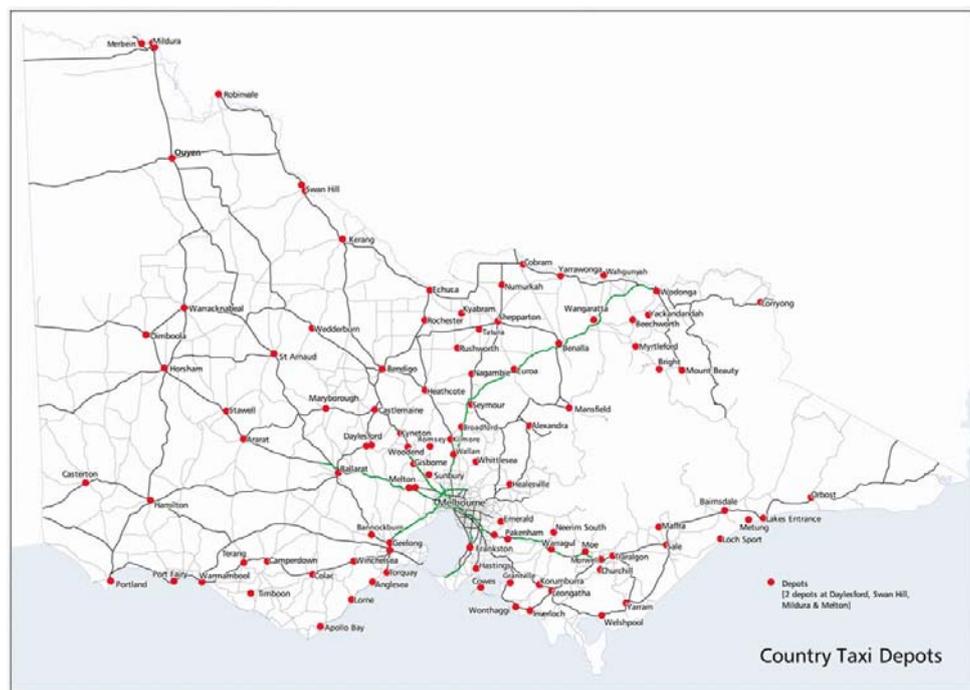
The DHS submission indicated that the MPTP segment of the market needs to be considered, especially in country areas, and the affordability of services given consideration.

On the other hand, the VTA has emphasised that:

The issue is not to force the taxi industry to provide a special deal for country people based on special needs. Welfare-related issues are best addressed by State Government policy. The primary issue is to make fare relativities reflect cost relativities in the different locations.¹¹⁴

It will not be possible for taxi services to efficiently operate in all towns. The taxi depots in country Victorian towns are shown in Figure 5.2. Overall, there is a good penetration of taxi services into Victorian country towns. This suggests that it would be difficult to improve the balance between affordability and availability of taxi services in regional Victoria – as represented by the level of the fare premium for country areas. Too high a premium would impact on demand, whereas too low a premium would provide for insufficient cost recovery.

Figure 5.2 Taxi depots – regional Victoria



Data source: DOI website

5.3.4 Conclusions on country fare structures

The prevailing returns to country taxi operators needs to be considered in light of the surprisingly high licence rental costs and the relatively low margins, and

¹¹⁴ VTA submission, p.12

recognising that in country areas taxi operators are also typically the licence holder. Given this, the analysis of taxi operator costs does not provide support for an increase in the premium currently applying to country taxi fares.

The average fare levels in country areas will be advantaged by changes to the fare structure in relation to booking and flag-fall charges proposed in this Draft Report. Furthermore, some specific proposals have been formulated in relation to better cost recovery from 'out of zone' jobs.

The economic situation of country taxi cab operations will be further benefited by other preliminary conclusions made in this report in relation to the operation of the MPTP scheme.

Preliminary conclusions

The Commission does not recommend any change to the relativity between metropolitan and country distance charges.

The fixed and variable components of the country and regional tariffs should be rebalanced to reflect the same relativities as in the metropolitan tariff.

The terms of reference direct the Commission to consider the appropriateness of selected surcharges, including time of use surcharges and the surcharge for pre-booked premium service taxis, and whether the latter should form a permanent part of the taxi fare structure. This chapter presents the Commission's preliminary views on these aspects of the terms of reference.

6.1 Time-of-use Surcharges

The Victorian taxi fare structure has two 'time of use' surcharges:

- The Late Night Surcharge in the Metropolitan Zone, or 'Late Night Extra' in other zones, and
- The New Year's Eve surcharge applying in the country

6.1.1 Late Night Surcharges

Like most other jurisdictions in Australia, Victoria has higher taxi fares during late night hours. However this varies between zones.

- in the Melbourne metropolitan zone the Late Night Surcharge applies between midnight and 5am every morning, and represents a 20% surcharge on the total fare
- in the Melbourne outer suburban zone the Late Night Extra applies from midnight to 6am every morning, and is a \$1.30 surcharge
- in the regional and country zones the Late Night Extra applies from midnight to 6am every morning, and is a \$2.60 surcharge.

In each case this is a mandatory fare element. Under the provisions of s144(2)(da) of the *Transport Act 1983* the Late Night Surcharge in the metropolitan area is retained in full by the driver of the cab¹¹⁵. The same requirement does not apply to the late night extra applied in the outer metropolitan, regional and country areas. The VTA has estimated that 15% of all taxi trips occur in late night periods.

¹¹⁵ Section 144 of the Transport Act permits VTD to set licence conditions, and section 144(2)(d) is a provision enabling VTD to establish as a licence condition the fares as determined by the Minister. In relation to "quarantining", s.144(2)(da) specifically permits VTD to require that "any late night surcharge payable by a passenger in a taxi-cab is to be retained by the driver of the taxi cab". VTD sets the fares by notice to taxi operators providing the schedule and invoking s.144(2)(da) with respect to the quarantining of the Late Night Surcharge. Section 144(5) of the Transport Act ensures that the quarantining of the Late Night Surcharge overrides any private contract.

Views of stakeholders

There was a common view in submissions that the surcharges are not high enough and should be applied more consistently. With respect to the Late Night Surcharge, the VTA stated that:

A 20% surcharge is unlikely to sufficiently reflect extra costs involved.¹¹⁶

Mr John Glazebrook has highlighted the additional risks or costs potentially borne by drivers and operators of cabs on certain nights of the week.

Taxi drivers and operators in Victoria have no authority to obtain compensation from passengers who spoil or damage a taxi with vomit due to alcohol consumption. A driver is forced to take time out to clean up the taxi and it may mean several hours off the road before all foul smells dissipate from the interior. ...Alcohol abuse can lead to aggressive behaviours with damage to taxis and property. Vandalism and damage to taxis has to be paid by the licence operator. ... The 20% surcharge on top of standard taxi fares between midnight and 5.00am does not compensate licence operators for vandalism to taxis or spoilage to the interior with vomit.

Mr Hunt suggested that the Late Night Surcharge of 20% should apply from 10pm to 6am each night, and all day Saturday and Sunday. A recent letter from the VTA to the Director of Public Transport¹¹⁷ argues that Late Night Surcharges should apply to all public holidays.

Discussion

For comparison, other jurisdictions have the following:

- in NSW there is a 20% surcharge on the distance rate only, applying during the period from 10pm to 6am each night.
- in Queensland the flag-fall charge is \$1.30 higher in the period from 7pm to 7am on weekdays and all day on weekends, in metropolitan, regional and country areas. On average this amounts to a surcharge of less than 7% on the average week-day day-time fare.
- in Western Australia the flag-fall charge is \$1.50 higher in the period from 6pm to 6am on weekdays and all day on weekends in metropolitan and country areas. There is also an 'ultra peak surcharge' applying on Friday and Saturday nights from midnight to 5am, of \$2.00. The surcharge applying outside the ultra-peak times is approximately 9% above the average weekday, day-time fare. The ultra-peak surcharge accounts for an increase of just over 20%.
- in the ACT the distance rate is 25c (15%) higher in the period from 9pm to 6am on weekdays and all day on weekends and public holidays.

In summary, in most of the interstate jurisdictions the 'night rate' for taxi fares covers weekends also, and therefore covers between one third to half of the week.

¹¹⁶ p.13

¹¹⁷ provided to the Commission by the VTA

In those jurisdictions the average level of the surcharge is significantly below that in Melbourne –typically less than 10%.

In Melbourne and Sydney, the surcharge applies only to night-time periods. In Melbourne it covers approximately 20% of the week, and in Sydney, slightly more. The surcharge levels are higher in Melbourne (20%) than in Sydney (averaging 17%), and in both cases, of similar levels to the ultra-peak surcharge in Western Australia.

Hence, in the inter-jurisdictional comparisons there is a clear trade-off between the level of the surcharge and the period over which it applies. Having regard to this trade-off, the surcharge in Melbourne is fairly consistent with the application of the surcharge over relatively shorter periods of the week.

Various rationales have been put forward for the late night surcharges. IPART suggests that the late night surcharge is intended to compensate drivers for lower level of demand in late night periods, and to compensate drivers better in order to ensure a reasonable level of taxi service supply in night periods.¹¹⁸ Similarly, the ICRC indicates that in the ACT the surcharge was intended to ‘improve response times and availability in the evening, the early hours of the morning and the weekend by rewarding drivers who work at these times with a higher fare’.¹¹⁹

The VTA suggests that surcharges on weekends and public holidays are desirable to effectively provide drivers with ‘penalty rates’ on these days, and to ensure all available cabs are on the road.¹²⁰

Another rationale, not commonly canvassed, is that demand may be less elastic at times when public transport is not operating, and it may be economically efficient to charge a higher price at those times, thereby recovering a relatively greater proportion of indirect costs from the relatively less price-sensitive demands. This consideration would tend to support the retention of the current ‘late night’ period, or even its narrowing, as the hours of operation of public transport have extended beyond midnight.

Comparisons with other jurisdictions suggest that if the late night surcharge were broader in its application, it should be at a lower level. However, there is insufficient evidence that a broader application of the Late Night Surcharge to weekend day-time periods would address identified supply shortcomings during those times.

A number of submitters have raised concerns about the lack of consistency as between the application of the Late Night Surcharge between the metropolitan and the Outer Suburban zones. The Commission is not aware of any rationale for this inconsistency. Similarly, while a number of stakeholder have identified concerns about the lack of availability of taxis in some country areas at night-time, no reasons have emerged as to why the night-time surcharge applying in country areas is lower than in the Metropolitan area.

¹¹⁸ IPART (February 2008) ‘2008 Review of Taxi Fares in NSW: Transport - Issues Paper’, p.31

¹¹⁹ ICRC (May 2004) Final Report: Determination of Taxi Fares for the Period 1 July 2004 to 30 June 2007’, p.60

¹²⁰ VTA, letter to the Director of Public Transport dated 31/7/07 (provided to the Commission by VTA)

Preliminary conclusions:

There does not appear to be sufficient basis for altering the current 20% Late Night Surcharge that applies to the periods from midnight to 5am each night-time in the metropolitan area.

The Commission sees merit in having consistency between the metropolitan, outer suburban, regional and country zones with respect to the application of the late night surcharge/extra. That is, the application of a 20% higher fare in the periods from midnight to 5am should apply in all zones.

6.1.2 The New Year's Eve surcharge

The purpose of surcharges is to provide incentives to ensure that all cabs are on the road in peak periods and to balance demand with an efficient supply of cabs without an over-supply in off-peak periods. In recent years a New Year's Eve (NYE) surcharge of \$5.50 has applied in country areas.

The Commission has previously assessed the merits of a temporary application of the NYE surcharge only in country areas. In the current Review the Commission is directed to assess whether it should form a permanent part of the fare structure. The VTD has also requested that the Commission address whether this surcharge should apply equally to the metropolitan area.

In its previous advice on the NYE surcharge, the emphasis of the Commission's assessment has been on whether the \$5.50 surcharge provides a sufficient incentive for country taxi operators to maintain taxis in operation at these times. The comments received in the Commission's consultations to date on this question indicate that the NYE surcharge does provide adequate incentive to taxi operators. However, comments received also suggest that the surcharge is considered to be relatively high, and as a result, taxi operators often waive it.

Other stakeholders have suggested that the Late Night Surcharge should be considered for application on public holidays. This represents an alternative to the NYE surcharge.

The Late Night Surcharge of 20% translates into \$3.70 when applied to the average fare shown in Table 4.2 (which is \$18.35 before the Late Night Surcharge is included). This will be larger for longer than average trips. At \$3.70 the average rate is lower than the NYE surcharge and may represent an appropriate level of surcharge.

If the Late Night Surcharge is to apply to certain public holidays where there are significant taxi supply shortfall issues, then greater simplicity in the fare structure could be achieved by also applying the Late Night Surcharge on New Year's Eve. This is the Commission's preferred approach. However, the surcharges should not be applied broadly, but only to those days of the year when the most significant supply shortcomings are likely to emerge. The Commission's preliminary view is that these days are Christmas Day, Boxing Day, New Year's Eve and New Year's Day.

Preliminary conclusions

The NYE surcharge should be replaced by the Late Night Surcharge (i.e. 20%). This should apply equally to all zones. It should apply all day on Christmas Day, Boxing Day, New Year's Eve and New Year's Day.

6.2 Premium service taxis

Two taxi depots are now providing premium, or 'Silver Service', taxis to their passengers, Silver Top Taxis and Black Cabs. Silver service offers customers a higher quality vehicle than most ordinary taxis, as well as more experienced drivers. Silver Service taxis attract an additional \$11 pre-booking fee where a Silver Service cab is specifically requested, although such taxis can also service conventional bookings or the rank and hail market as ordinary taxis without imposing this fee.

'Silver Service' taxis operate on the same standard licence as conventional taxis, unlike WATs or HOVs which have a separate class of taxi licence. The Premium Service Surcharge is allowed through a variation of the licence conditions, granted by a temporary permit authority from the VTD (see Box 6.1 for an example of the permit conditions). The permit costs \$63.00, and each has a standard expiry date of 31 December. In effect, this means that the permit to charge a Premium Service Surcharge must be reissued every 12 months. The depot is responsible for nominating each taxi that is to be covered by a temporary permit.

The depot sets the accreditation standards for premium service vehicles (subject to the make of the vehicle meeting the permit requirements), and it is the depot, not the VTD, who sets the standards to be met for qualifying as a premium service driver.

VTD has advised the Commission that in 2006 there were 66 premium service permits, whereas in April 2007 there were only 33 permits on issue. However, the major taxi depots have advised the Commission that they have almost 300 affiliated silver service taxis, representing approximately 8% of their combined affiliated fleets. Therefore, it may be that a significant proportion of premium service taxis are currently operating without a permit in place to enable the premium service surcharge to be made. There does not appear to be an effective process for ensuring that only taxis with premium service permits can charge the Premium Service Surcharge.

The Premium Service Surcharge is not covered by the MPTP. This reflects a desire by policymakers to not cover the cost of what is ostensibly a choice on the part of individual consumers to enjoy a higher quality service. To prevent its inclusion in subsidy payments, the Premium Service Surcharge is levied in addition to the recorded fare on the taximeter (i.e. as an "off meter" charge).

Box 6.1 Permit for 'Silver Service' taxis

The driver of the taxi-cab specified in this permit is authorised to charge a Premium Service Surcharge of \$11.00 (including GST), in addition to the total metered fare, when all of the following conditions are met:

- (i) *the hiring has been pre-booked through the approved depot and the hirer has specifically requested the depot's Premium Service;*
- (ii) *at the time of making the booking the depot has advised the hirer of the surcharge payable for the Premium Service and the hirer agrees to pay the surcharge;*
- (iii) *the taxi supplied for the hiring meets the depot's accreditation standard for provision of that depot's Premium Service and is a Ford Fairlane, Holden Statesman or a vehicle that is of an equivalent or higher standard; and*
- (iv) *the driver of the taxi-cab is, at the time of the hiring, accredited by the depot to provide that depot's Premium Service.*

The Premium Service Surcharge must not be added to, or otherwise included in, any fare calculation for the purposes of subsidised taxi fares under the Multi Purpose Taxi Program.

Source: Victorian Taxi Directorate

While the Premium Service Surcharge generates additional revenue for taxi firms, it is also clear that premium service vehicles carry higher costs as well. Specifically, the vehicles used are more expensive than standard taxi sedans. Based on advertisements contained within industry publications, premium taxi vehicles (such as the Holden Statesman or Ford Fairlane) are approximately 60-75% more expensive than conventional cabs¹²¹. Nevertheless, even in markets where no premium service surcharge is permitted (e.g. Sydney), premium service taxis have emerged as a means of attracting business through improved service quality.

Assuming the additional annual vehicle lease cost facing operators of a premium service sedan is \$5,000¹²², then the operator would need to obtain approximately 450 jobs which attract the Premium Service Surcharge annually in order for the premium service taxi to break even (assuming an average premium service cab has a similar number of jobs per year to an average conventional cab). This would represent at least 10-15% of its pre-booked jobs (assuming around 50% of jobs are pre-booked).

6.2.1 Competition with hire cars

The provision of premium services has traditionally been the hallmark of the hire car industry – a market that is separated from taxis through regulation. Hire cars

¹²¹ Prices quoted in advertisements in various 2007 editions of 13CABS's driver newsletter were compared. (Weekly leasing rates are quoted by 13CABS, which when annualised equate approximately to the annual purchase cost of the vehicle spread over four years.)

¹²² i.e. 75% over an above PwC's estimate of the lease costs of conventional cabs.

can only offer services to customers who pre-book – they are private carriers, not common carriers as taxis are in servicing rank and hail market segments. While Silver Service taxis and their drivers continue to operate in the rank and hail markets, it is only in pre-bookings that the premium service (and the surcharge for it) is found to apply. Furthermore, hire cars tend to use higher quality vehicles, such as the Holden Statesman or Ford Fairlane, which are precisely the vehicles being used for Silver Service.

In a submission to the Commission's 2004 Review of Hire Car Licence Fees, the Victorian Hire Car Association (**VHCA**) gave an example of a key market in which taxis and hire cars routinely compete – transporting passengers to Melbourne Airport at Tullamarine. The VHCA calculated that a 30 kilometre trip to Melbourne Airport would cost somewhere between \$60 and \$75 in a hire car, or between \$55 and \$65 in a taxi¹²³. Assuming that the quoted taxi fare was for a conventional taxi, a Silver Service fare in 2004 might have been between \$65 and \$75 dollars – making it directly comparable to hire cars.

The hire car industry is, like taxis, regulated by the VTD. However in the case of hire cars, the VTD does not regulate the fare structure. Instead, the price charged for a hire car is directly negotiated between the operator and the hirer at the time of booking. Licences to operate hire cars are tradeable, with the average market value being \$58,450 in November¹²⁴. New licences are issued by the VTD at a premium to these for a fee of \$60,500.

Both the taxi and hire car industries have previously argued that their two markets are quite distinct – that there are stark differences between the two which justify their separate treatment in regulation and legislation. For instance, the VTA states:

In recent years a view has developed in competition economics as applied to the State transport sector that hire cars are substitutes or near substitutes for taxi-cabs. [...]

The reality is that hire cars are to taxi-cabs what long distance luxury cruising coaches are to suburban route buses. They have similarities, but would hardly be seen by most observers as substitutes for one another.¹²⁵

While the VHCA argues:

Hire Car and SV [Special Vehicle] operators tend to concentrate on providing a high level personalised service to niche markets such as weddings, funerals, corporate and government work. Any crossover work with the taxi networks is at the margins and mainly extends to pre-booked airport and dinner transfer work.¹²⁶

¹²³ Victorian Hire Car Association (VHCA) 2004b, *Victorian Hire Car Industry Response to Essential Services ESC Review of Hire Car Licence Fee Draft Report*, July, p. 9.

¹²⁴ Taxi Talk 2007, December, p. 16.

¹²⁵ Victorian Taxi Association (VTA) 2004, Submission to the Essential Services Commission Review of Hire Car Licence Fees, Issues Paper, April, p. 1.

¹²⁶ Victorian Hire Car Association (VHCA) 2004a, Submission to the Essential Services Commission Review of Hire Car Licence Fees, Issues Paper, May, p. 3.

The advent of premium taxi services reduces these distinctions. Hire cars and premium service taxis are close substitutes, because the nature of the services they provide is similar. In its 2004 review of Hire Car Licence Fees, the Commission noted that:

[...] it appears the taxi industry is increasingly serving the premium sector of the market (through the provision of 'silver' services and vehicles of higher standard, for example) even as hire car operators are increasingly moving into the wider mainstream market. Therefore, the overall picture may be one in which the degree of substitutability between these two categories of commercial passenger vehicle is increasing, thereby improving competition for the benefit of consumers. Despite the scepticism expressed in some submissions, the Commission is of the view that hire cars have the potential to represent an effective substitute to taxis for a range of consumers in a range of circumstances based on industry analysis and submissions to the review¹²⁷.

In summary, there is a degree of competition between taxis and hire cars in key market segments, such as the transport of passengers to and from the airport. The degree of substitutability must be highest in those segments in which premium services operate.

In its submission to this Review, the VTA argued:

Premium services offered by taxis compete with pre-booked hire car services. As the ESC notes there may not be a 'level playing field' between these different industry segments. The proposed surcharge for premium services should allow taxis to compete effectively with hire cars in this segment of the market.

If an upper bound to this fee is established by effective competition with hire cars it is difficult to see a case for regulations to establish it. The fee can be largely market-determined given that there is effective and sufficient competition.

IPART has indicated that if a premium service surcharge is to be allowed in NSW, then 'it would be necessary to define and regulate quality of service for premium taxis'.¹²⁸

The potential degree of competition between premium service taxi-cabs and hire cars depends on whether, in all relevant respects, there is a 'level playing field' between taxis and hire cars. To the extent that competition is effective, then consumers in this market are likely to have alternatives available, and there shouldn't be concerns about the premium service surcharge, as long as this is a maximum charge rather than a mandatory charge. By formulating the premium service surcharge as a maximum, the taxi operator retains the ability to reduce or discount from the surcharge if this is necessary to compete effectively with hire cars or other providers of premium services.

¹²⁷ Essential Services Commission (ESC) 2004, *Review of Hire Car Licence Fees*, Final Report, June, p. 26.

¹²⁸ IPART (February 2008), p.50

However, there are some aspects of hire car market regulation that limit its competitiveness against taxi services. One constraint is that hire cars are not allowed to charge a scheduled tariff. They are only allowed to negotiate a full fare per trip. This constraint limits the ability of hire cars to offer a directly comparable price against taxi-cabs, and thereby diminishes their ability to compete.

6.2.2 Proposed reforms to fare regulation

In the 2005 Taxi Fare Review the Commission highlighted examples of the constraints on competitiveness of some types of services imposed by the existing mandatory fare regime. This is not common among Australian jurisdictions. As a general principle, taxi operators should be allowed to discount from their fares where it is advantageous to do so. By implication of the voluntary nature of such transactions, this would be of benefit. At present this form of discounting is only available for contract or regular bookings, or journeys of more than 80km (in country areas).

Of particular interest is the pre-booked taxi market. Several economic studies have highlighted the marked differences between the market for pre-booked taxis and hire cars and the market for taxis hailed or taken from ranks. Most of the arguments relating to market failure in the taxi market are confined to the rank and hail market. The pre-booked market has much greater scope for consumer choice, and in principle, operates like most other markets. For these reasons, opportunities that provide greater scope for competition in the pre-booked market should be identified and implemented.

One of the options is to remove constraints to competition between taxi service providers in the pre-booked market. One reform to this end would be to adopt a system of 'posted prices', by which taxi companies can substitute alternative (discounted) tariff schedules to replace those determined by the regulator or Minister. Taxi firms would be able to set their own prices for pre-booked services.

There is also the option of removing constraints to competition between taxis and hire cars. At present, hire cars are prohibited from having a fixed fare schedule – for example, a price per kilometre, or per passenger. They must agree a total fixed fee for the journey before it commences. This constraint to the pricing of hire car services is highly unusual, and appears to be directed to limiting their effectiveness as competitors to taxis by preventing customers from being able to make clear price comparisons. It is recommended that this constraint be removed, thereby enabling hire cars to pursue pricing strategies that most effectively enable them to compete with each other and with taxi and other passenger services.

Preliminary Conclusions:

A more 'level playing field' should be established between taxis and hire cars by:

- Adopting a maximum fare regime for pre-booked taxi services, under which taxi companies can post an alternative (discounted) tariff schedule to replace those determined by the regulator or Minister.

- Removing constraints on hire cars offering scheduled fares, to enable them to compete more directly with pre-booked taxi services.

Within this context, the Commission sees merit in permitting the Premium Service Surcharge for pre-booked services where the customer specifically requests a premium service, and where the taxi-cab driver and taxi cab are authorised to do so.

The authorisation of a taxi cab and driver to provide premium services should be by permit issued by the VTD based on their meeting defined criteria.

7 FACTORS RELEVANT TO THE DISTRIBUTION OF INCOME BETWEEN DRIVERS, OPERATORS, LICENCE HOLDERS AND DEPOTS

The Commission is required to report on:

the distribution of taxi fare revenue and measures that may be considered by Government to improve taxi driver remuneration

The first section of this chapter provides an overview of how taxi industry revenue is currently distributed amongst the industry participants, including the market structures that influence the relative bargaining positions of the parties.

The remainder of the chapter considers options available to policymakers to improve driver remuneration. In framing these options the Commission has had particular regard to the overall objectives for the taxi industry, as outlined in chapter 3. These objectives include improving customer service standards, providing suitable careers for taxi drivers in the industry and the sustainable provision of taxi services by operators, as well as affordable taxi services for users.

7.1 Income distribution

Taxi fare revenue is divided between the four main types of industry participants: taxi operators; drivers; depots/networks; and licence holders.

- Taxi operators retain the revenues not allocated to drivers and pay for the costs of operating and maintaining the taxis. They also pay network fees to depots/networks and licence assignment fees to licence holders (or licence rental fees to the government for post-2002 licences). Their income depends on the payments to the other industry participants.
- Drivers' share of fare revenue will depend on the terms and conditions of bailment agreements. In Victoria approximately 95% of all non-operator drivers are engaged under a 50/50 revenue sharing arrangement, and typically do not pay for fuel costs. However, they incur some costs such as superannuation (approximately half of the driver survey respondents also indicated that they spend approximately \$10 per week on cleaning taxis).
- Depots/networks receive network fees from taxi operators for a range of services. However there is a high degree of concentration in depots, so that there is little competitive pressure on the level of these fees.
- Holders of pre-2002 licences receive assignment fees from taxi operators for the rental of licences. Licence assignment fees are determined in a market for licence assignments. This market is characterised by a large number of

prospective taxi operators and a limited supply of licences, suggesting that licence holders are able to extract economic rents.

Some individuals have more than one of these roles, but the focus in this report is on their separate capacities, as a driver, licence holder or operator.

7.1.1 Driver remuneration

Concerns about the levels of driver income have been expressed in earlier reviews, including by KPMG Consulting in its 1999 NCP Review of Taxicab Legislation. KPMG found, based on a 1998 survey of taxi drivers by the VTA, that an average taxi driver gross hourly rate was approximately 32% below that of a Chubb Security Guard, 37% below the Award wage (full time), 50% below a casual bus driver, and 36% above the single-person unemployment benefit¹²⁹. KPMG observed:

Low remuneration for drivers may not simply be the outcome of a fully competitive labour market. There is a concern that high concentration 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.¹³⁰

Bailment agreements

Almost all drivers who are not licence holders or operators are sub-contracted to operators through Bailment Agreements. These agreements specifically exclude any relationship of employment, agency, partnership or franchise¹³¹. Instead, bailee drivers are classed as self-employed. As a result they are not entitled to the usual benefits of permanent employees such as superannuation, annual, sick or long service leave, and so forth. However, this is different in New South Wales, where agreements allow for the provision of paid leave to permanent drivers, and are regulated by the state's Office of Industrial Relations. Bailment agreements are not regulated in Victoria.

Bailee drivers in Victoria face different options for "bailing" a taxi-cab. By far the most common option is to pay a fixed percentage of the fare revenue (as recorded by the taximeter) to the operator, with drivers retaining 50% of the fare revenue. VTD survey data reports 88% of all bailee drivers operate on this type of arrangement¹³², while the PwC survey data suggests it applies to 95% of drivers. Alternative options of rental payment included in the VTA's standard agreement are:

- a fixed percentage of fare revenue in addition to a flat fee for the period of bailment

¹²⁹ KPMG Consulting (July 1999) 'National Competition Policy Review of Taxi-cab and Small Commercial Passenger Vehicle Legislation', p. 50

¹³⁰ KPMG Consulting (July 1999) p.51

¹³¹ Victorian Taxi Association (VTA) 2002a, "Taxi Cab Bailment Agreement", p. 17.

¹³² Market Solutions 2006, op cit, p. 22.

- a flat fee (fixed pay-in) for the period of bailment in addition to a variable fee dependent on the number of kilometres travelled in excess of a free kilometre ceiling¹³³; or
- a negotiated rental arrangement between the bailee and bailor (taxi operator), compliant with the terms of the bailment agreement.

Additionally, taxi drivers are required as part of the VTA standard bailment agreement to pay a bond to the bailor. While ordinarily this bond would be repaid to the bailee upon conclusion of the contractual relationship, the agreement spells out the conditions under which this bond might be retained in part or in full for the bailor – specifically in the context of accidents and other general vehicle repairs where the bailee is found to be at fault.

Although bailment agreements place different obligations upon a driver as a self-employed contractor than what they would face as an employee, they also provide different rights. For instance, while an employee is expected to form an exclusive relationship with one employer, in theory a bailee driver can offer their services to a number of different bailors. However, none of the sources of information reviewed by the Commission indicate that this practice is prevalent.

The bailment arrangement is based on the notion that a driver rents the taxi cab in order to carry on their own business. The clearest example of this relationship is with fixed pay-in contracts. In metropolitan Sydney a high proportion of drivers operate on fixed pay-in contracts. This is also a common option in Brisbane and in Perth. In Melbourne, by contrast, almost all drivers are paid through revenue sharing arrangements.

The Federal Court found that:

*While the fixed payment method more clearly is marked as a bailment, than the gross percentage of meter method, I don't think that ultimately a distinction should be drawn between them*¹³⁴

Secondly, electronic transactions change the relationship between the driver and the operator. The Federal Court relied in part on this aspect of the transaction in its 1997 ruling on bailment arrangements:

*The real relationship between operators and drivers is that the drivers make payment to the operators for the right to bail the cabs and ply them in their own business. They are neither employees in the ordinary sense, nor do they receive payments under contracts for their labour.*¹³⁵

¹³³ For example, if there is a 100km 'free kilometre ceiling', then if a taxi-cab travels less than 100km during a given shift, the driver will only be liable to pay a flat fee. Beyond this point, each subsequent kilometre travelled in a shift attracts an additional fee.

¹³⁴ Federal Court (28 August 1997) 'Deluxe Red and Yellow Cabs Co-operative (Trading) Society Lt & Ors v F C of T

¹³⁵ Federal Court (28 August 1997) 'Deluxe Red and Yellow Cabs Co-operative (Trading) Society Lt & Ors v F C of T

With the increasing use of credit card and other charge card transactions through the Cabcharge system, revenues are accrued by taxi operators through settlements with the Cabcharge system, and drivers are paid by operators through their electronic systems. Hence the technology changes have resulted in a situation where taxi drivers are to an increasing extent paid by operators, contrary to the facts relied upon by the Federal Court in arriving at its judgement that taxi drivers operating under signed bailment agreements are not employees.

Some of the other features of the relationship between a bailor and a bailee which the Federal Court considered distinguished it from an employment relationship included:

- Although some control is exercised by the operators over the driver, that control is only such as is necessary to ensure compliance with legislation concerning taxis and the running of a network, rather than signifying an employment relationship
- Drivers 'pay for the petrol consumed and the cost of keeping the cars clean'

In Victorian bailment arrangements, the operator typically pays for fuel costs. Drivers wear the network uniform, and networks appear to exercise a significant degree of control over drivers, although whether this would be equivalent to that under an employment relationship cannot be assessed.

Finally, an essential aspect of the bailment arrangement is the existence of a signed bailment agreement. There seems to be some doubt about how many drivers have bailment agreements, and the extent to which operators can unilaterally vary the bailment terms. The Transport Workers' Union (TWU) claims that while the majority of drivers serve under bailment arrangements, only a minority of drivers have actually signed a formal agreement¹³⁶. VTD's 2006 survey of drivers reported that 41% of bailee drivers surveyed stated they had not signed a bailment agreement – although it was suggested that this may reflect a lack of understanding of what they had signed.¹³⁷

The terms of the bailment agreement indicate that the relationship between the driver and operator is intended to be one of bailment, not employment. However, the characterisation of the relationship between a particular driver and operator will depend on the circumstances of that relationship.

Remuneration

The results of the PwC survey of taxi drivers and operators indicate that the average taxi driver income in Victoria in 2007 was \$13.20 per hour. It must be emphasised that this does not include tips, which accrue to the driver under the bailment agreement¹³⁸.

¹³⁶ Transport Workers' Union (Victorian/Tasmanian Branch) 2007, Submission to DOI on Taxi-Cab Industry Accreditation Business and Service Standards, November, p. 4.

¹³⁷ Market Solutions 2006, op cit, p. 21.

¹³⁸ For example, if the average tip were 5% of the fare, then tips would increase driver income by 10%.

This estimate of driver income is significantly higher than previous estimates published by the Commission in its 2005 Taxi Fare Review of between \$7.50 and \$8.00 an hour¹³⁹. On the other hand it is broadly consistent with information in submissions. One taxi driver, Mr David Griffiths suggested:

I kept accurate hour/income records for July and August 2007, and earned \$13 an hour not including GST but before business expenses. I earn more than some because I am a very experienced driver and get to start earlier than normal change over and finish most nights around 1 am, i.e. drive the most productive hours. But I guarantee the drivers are earning \$2 an hour more than they say.¹⁴⁰

It is beneficial to consider driver remuneration in the context of benchmarks drawn from related industries and other jurisdictions. As a point of comparison, a submission by Southern Cross to the Commission's 2004 review of Hire Car Licence Fees suggested that hire car drivers earned approximately \$40,000 per annum, based on a 60 hour week, working 50 weeks a year¹⁴¹. The equivalent hourly rate for this would be approximately \$13.00 an hour (escalated by CPI, this would represent \$14.40 per hour in June 2007 dollars). A 2001 Queensland review calculated that taxi drivers in that state were averaging \$11.72 an hour¹⁴² (escalated by CPI, this would represent \$13.80 per hour in June 2007 dollars). The NSW Taxi Drivers Association has claimed that drivers earned around \$12 per hour in 2007¹⁴³.

Another comparative benchmark is provided in the submission from Mr Wally Hunt, average full time weekly earnings of \$15.79 per hour. PwC reports the award rate of pay for a NSW bus driver to be \$19.64 per hour¹⁴⁴. The NSW Taxi Council suggested that the appropriate benchmark is the NSW Industrial Relations Commission determination on the rate for downtime for taxi drivers¹⁴⁵, which is currently \$17.60 per hour. The Taxi Drivers Association of Victoria has suggested a relevant award benchmark is \$15.95 per hour. The Federal Vehicle Industry Award 2000 (which applies to Victoria) includes an hourly rate for a driver under 10 tonnes

¹³⁹ Essential Services Commission (ESC) 2005, *Taxi Fare Review 2005: Final Report*, June, p. 25.

¹⁴⁰ Griffiths, D. 2008, Submission to the Essential Services Commission Taxi Fare Review 2007-08: Issues Paper.

¹⁴¹ Southern Cross 2004, Response to Essential Services Commission Draft Report Review of Hire Car Licence Fee, July, p. 7.

¹⁴² Queensland Department of Industrial Relations and Queensland Transport 2001, *Review of Taxi Driver Remuneration and Conditions of Work*, Interdepartmental Review Committee, August, p. 16.

¹⁴³ NSW Taxi Drivers Association 2007, Submission to IPART's Review of Taxi Fares 2007, April, p. 10

¹⁴⁴ PwC (January 2008) 'Ministry of Transport: Review of Weightings in Taxi Cost Model', p.12

¹⁴⁵ NSW Taxi Drivers Association, submission to IPART, March 2008, p.3

of \$14.55 per hour.¹⁴⁶ The Federal Minimum Wage is \$13.74 per hour. Mr Griffiths refers to the minimum casual rate as an appropriate benchmark – this is a 20% loading onto the hourly wage or \$16.49 per hour.

Driver supply conditions

While driver remuneration is regarded as relatively low, there are other, non-pecuniary characteristics of work that drivers may find favourable. According to VTD surveys, drivers obtain satisfaction from being their own boss and from their service to the public¹⁴⁷. Another advantage that is routinely cited is flexibility in working hours. As Hooper states, “the flexibility of the bailee arrangement suits many of the drivers as it allows them to move into and out of the industry according to their circumstances”¹⁴⁸. For instance, approximately 12% of taxi drivers are either part-time or full-time students¹⁴⁹. Given their study commitments, flexibility in working hours may make taxi driving an attractive profession for some students.

Overall, the taxi industry displays high driver turnover. A survey of taxi drivers has found that 55% of drivers are satisfied with taxi driving¹⁵⁰. Satisfaction levels amongst taxi drivers tend to reach their lowest point among those who have been in the industry for between three and five years¹⁵¹. Reflecting this pattern of dissatisfaction, driver surveys suggest that a high proportion of drivers tend to leave the industry after less than five years. The implication of this high driver turnover is more inexperienced drivers with insufficient local knowledge, which detrimentally affects service quality to consumers.

The VTA, in a submission to the Commission’s 2005 fare review, argued that low remuneration contributed to drivers working longer hours and suffering from fatigue¹⁵². VTD research indicates that 59% of drivers work in excess of 50 hours a week – 13% in excess of 70¹⁵³. Fatigue also introduces a safety issue, influencing drivers’ decisions and reaction times. Furthermore, the operation of taxi cabs so as to maximise the amount of time spent on the road collecting fares can be detrimental to driver earnings on a per hour basis. At the Melbourne public forum, one taxi driver observed that the high supply of taxis in operation during low demand periods exerts a major effect on driver incomes.

¹⁴⁶ Federal Industrial Council of Retail Motor Industry, February 2006, ‘Submission of the Vehicle Industry Organisations to the Award review Taskforce’, p.9

¹⁴⁷ Market Solutions 2006, op cit, p. 8.

¹⁴⁸ Hooper, P. 1999, Submission of the Victorian Taxi Association on the Review of Regulation of the Victorian Taxi Industry, Victorian Taxi Association (VTA), April, p. 22.

¹⁴⁹ Market Solutions 2006, op cit, p. 6.

¹⁵⁰ Market Solutions 2006, op cit, p. ii

¹⁵¹ Market Solutions 2006, op cit, p. 31.

¹⁵² Victorian Taxi Association (VTA) 2005, Submission to the Essential Services Commission Taxi Fare Review 2005, May, pp. 16-17.

¹⁵³ Market Solutions 2006, *Taxi Driver Survey 2006 – Final Report*, Victorian Taxi Directorate, November, p. 28.

It has been suggested that there may be a problem in Melbourne with driver shortages¹⁵⁴. The evidence for this assertion is less than clear, with approximately 24,000 certified drivers – some 13,000 of these active in the industry. Despite the relatively low rates of pay, there continues to be a high level of drivers seeking to enter the industry. According to the VTD, 2,162 new metropolitan taxi drivers entered the industry during the 2005/06 financial year. The majority of new entrants are overseas students¹⁵⁵. This, to some degree, reflects the fluidity of the taxi labour market, and raises concerns about the quality of drivers.

Fairness of remuneration arrangements

The VTA has established an industry standard bailment agreement. It describes this framework as providing bailees and bailors with “a relationship based on mutual respect for each other, and transparent accountability to each other for proper performance of their respective responsibilities”¹⁵⁶. While operators can develop and offer their own bailment agreement, the VTA’s agreement is used extensively throughout the industry.

The TWU has noted that the VTA’s standard bailment agreement is offered throughout the industry on a “take-it-or-leave-it basis”¹⁵⁷, and similarly one taxi driver, Mr Griffiths, submitted that:

*[D]rivers have no clout and get given fait accompli something to sign prepared by the taxi industry. Then it is either you want to work or not, disagree and you lose access to a cab.*¹⁵⁸

There is a concern that the lack of choice in bailment arrangements arises due to misuse of market power. KPMG has previously identified this as a potential shortcoming of the current arrangements, noting in particular the importance of depots in the recruitment of drivers for operators, and their ability to “closely co-ordinate their activities through the VTA”¹⁵⁹. KPMG suggested that this produces an imbalance in bargaining power and results in lower incomes for drivers than a more open and competitive market would be likely to achieve. Low pay and limited benefits for drivers are certainly observable characteristics in the Victorian taxi industry today.

VTA commented on such issues, stating:

The ESC argument is that the taxi industry is a regulated monopoly with monopsonistic (here wage-setting) power in labour markets. In short, the view taken is that the industry can restrict the demand for drivers, thereby cutting their wages below what they would be under competitive conditions.

¹⁵⁴ Herald Sun 2004, “Our Taxi Shame”, 10 March.

¹⁵⁵ VTD 2007a, op cit.

¹⁵⁶ VTA 2002a, op cit, p. 4.

¹⁵⁷ Transport Workers’ Union (Victorian/Tasmanian Branch) 2007, op cit.

¹⁵⁸ Griffiths, D. 2008, op cit.

¹⁵⁹ KPMG Consulting 1999, op cit, p. 51.

...

This seems a totally unrealistic viewpoint. Monopsony power can only be exercised if workers have no alternative job opportunities. But this is clearly not the case in driver labour markets since there is competition between operators and with non-taxi firms such as public transport for drivers.¹⁶⁰

VTA's argument is not convincing. Taxi driving is a relatively liquid labour market which presents a considerably greater scale of job opportunities for casual drivers than public transport. This has meant that the taxi industry has been able to increasingly draw from a labour pool that does not have a wide range of competing opportunities. This view is supported by the finding of a recent DOI survey of drivers which found that 26% of drivers in the metropolitan zone are immigrants who have been in Australia for less than 5 years. Overall, 27% of taxi drivers in the metropolitan area have been driving for less than 2 years, while 32% have been driving for more than 10 years. Overall there appears to be a progressively greater use of drivers that could be expected to have fewer alternative opportunities.

The PwC surveys of taxi operators and drivers indicated that around 95% of bailment agreements are on the standard 50/50 revenue sharing basis, and 90% of drivers indicated that they were not offered a choice of payment arrangements when they entered into their bailment arrangements. This is consistent with the statement of taxi driver Mr Griffiths quoted above.

The extent of central influence over bailment arrangements by the VTA and the ability to vary the terms from shift to shift is highlighted by the response of the VTA to Government's announcement of a 4.2% fare increase in March 2008. To ensure operators received the benefit of the increase, VTA advised the industry to revise the revenue sharing formula under bailment agreements according to a specified formula:

The VTA is advising operators to amend their bailee driver rent arrangements to accommodate the new LPG offset component of the fare box so that all of the 4.2% increase flows to them. The following formula is being released to operators:

$$\text{LPG adjusted rent} = \frac{(P + 0.042)}{1.042} \times Z$$

Z = total new fare box amount

P = previous proportion of total fare box payed as rent as set out in the individual bailment agreement.

In most cases P is 0.5, so the adjustment formula simplifies to 0.5202 x Z. In other words, the rent increases from 50% to 52.02%

¹⁶⁰ VTA submission, p.14

of fare revenue. The driver retains the same amount of revenue as now.¹⁶¹

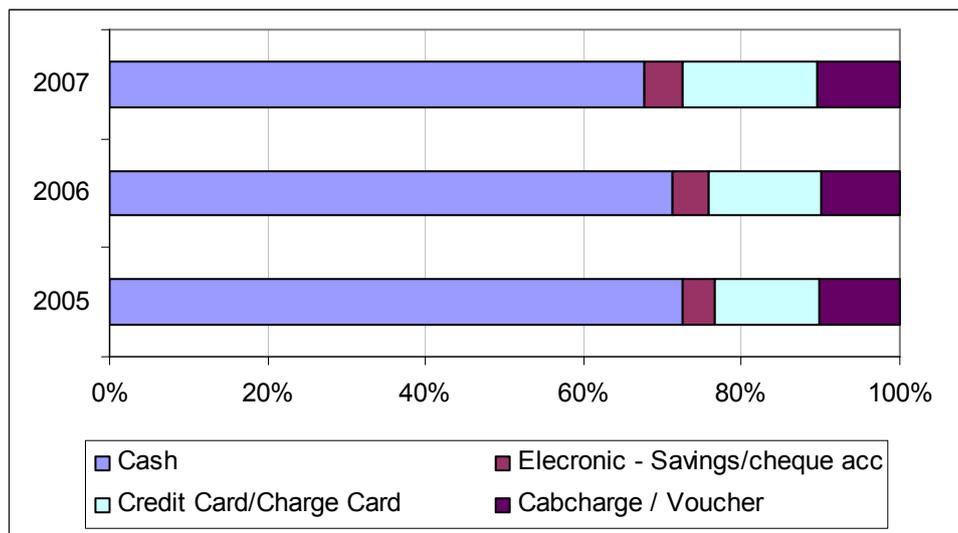
This form of coordination demonstrates the monopsonistic nature of the market power wielded by operators via their peak organisations.¹⁶²

7.1.2 Cabcharge fees

Cabcharge is the only provider of electronic transactions systems in Victorian Taxis. A 10% transaction fee is payable to Cabcharge on each electronic transaction. Figure 7.1 shows the growth in credit transactions and decline in cash transactions over the last three years.

An issue for driver remuneration is the resulting reduction in the amount of tips paid to the driver. Under bailment arrangements, drivers keep 100% of all tips. Electronic transactions tend to deter tips, thereby reducing driver remuneration. This point is made by Mr Wally Hunt in his submission.

Figure 7.1 **Methods of Payment**



Data source: DOI Taxi Customer Satisfaction Survey

7.1.3 Depots

The core function of network service providers is to take telephone bookings and despatch cabs to those jobs. However, networks also carry out a range of other

¹⁶¹ VTA email to VTD dated 22/3/08, provided to the Commission by VTD on 26/3/2008

¹⁶² The Commission notes that, if taxi operators agree with each other that they will revise their bailment agreements in this way, then they run the risk of engaging in pricing fixing in contravention of the Trade Practices Act.

functions, including quasi-regulatory functions in relation to taxi drivers¹⁶³, and support services for taxi operators and drivers. The NSW Taxi Council has summarised some of these additional roles as including:

*services such as: lost property; regulatory enforcement and compliance; alarm monitoring and responses; customer feedback; certification; driver queries; advisory services and representation.*¹⁶⁴

Market conditions for depots are characterised by highly imperfect competition. In the metropolitan area there are two dominant network service providers. Entry is restricted by the constraint on the number of depots approved by the VTD, but network fees are not regulated. The incumbent depots would also hold a substantial cost advantage over smaller networks due to the economies of scale of call-centre networks. For these reasons the determination of network fees can be expected to be 'oligopolistic', and include a 'monopoly rent' component.

Outside the metropolitan area, depots may be co-operatives between taxi operators, or fully integrated with the operations of a single taxi operator. This would tend to ensure that network fees relate to costs and not monopoly profits, although the costs of network operations will typically be higher on a per cab basis.

In the recent past, network fees increased following consolidation of the networks now affiliated with Black Cabs. The PwC 2007 survey shows that network fees have increased at an average annual rate of approximately 5% between 2004 and 2007.

Although taxi cab operators can in principle switch between depots, in practical terms, in any given location there is very little choice available. Hence network service providers are likely to have some ability to raise fees if industry revenues increase.

7.1.4 Operators & licence holders

Operators are the key link between licence holders, drivers and depots. Operators share the fare revenue with drivers under the terms of a bailment agreement. The different forms of bailment agreement have implications for the revenue and cost responsibilities of operators, and the degree of earnings risk. Under the 50/50 revenue sharing formula the operator pays for all fuel costs and receives 50% of revenue, whereas under a fixed pay-in arrangement the operator receives an up-front agreed payment from the bailee for the shift, and does not pay for the fuel for that shift.

Under all arrangements the operator pays for the purchase or lease of the vehicle and other operating and maintenance costs, as well as paying network fees to

¹⁶³ At present networks can impose penalties on drivers, although this may change under new accreditation arrangements.

¹⁶⁴ New South Wales Taxi Council (March 2008) 'Submission to The Independent Pricing and Regulatory Tribunal Review of Taxi Fares in New South Wales 2008', p.23

depots and assignment fees to licence holders. The financial position of an 'average' taxi operator has been described in detail in chapter 4.

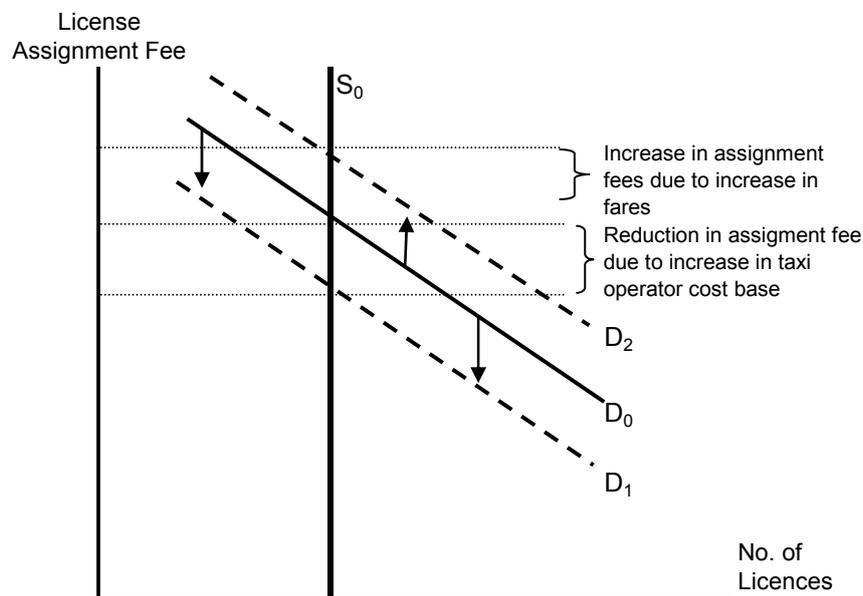
Figure 7.2 describes the process for determining licence assignment fees through the supply and demand conditions for licences. The supply of licences¹⁶⁵ is fixed by the Government. The demand for licences is the maximum amount that operators are willing to pay when they enter into a licence assignment contract, which is based on their expected operating profits. Due to the large number of potential taxi operators (as exemplified by the oversubscription of licence releases) compared to the constrained supply of licences, the bidding for licence assignments tends to drive operator returns to a minimum level. The PwC cost analysis found that the margins obtained by taxi operators in 2007 closely approximated the imputed operator equivalent salary associated with the additional administrative time involved.

This process for establishing licence assignment fees ensures licence holders capture the available economic rents. Licence values are the capitalised value of expected future assignment fees.

By implication, if taxi operator costs rise (e.g. due to LPG price increases) then the willingness to pay for licence assignments will decrease and the assignment fee should fall – as shown in Figure 7.2. Alternatively, if fares increase, the higher expected operator revenues will tend to push up licence assignment fees and values.

¹⁶⁵ See chapter 2 for information on perpetual (tradeable) licences issues pre-2002 and licences rented from the government since 2002, including the number of licences of each type and traded values of tradeable licences..

Figure 7.2 **Theoretical effect of increases in operator costs on licence assignment fees – market for licence rental**



Data source: ESC

Although taxi operator costs increased in late 2007 due to LPG prices, there appeared to be limited downward pressure on assignment fees. This tended to suggest there may be some price-stickiness in the market for licence assignments.

Similar views were expressed previously by the Commission in the 2005 fare review:

Similarly, there is some evidence, beyond that cited above in relation to rate of return, to suggest that operators also find themselves in a poor position in negotiations with licence owners in regard to assignment contracts. In an efficient market, operators struggling to earn adequate returns would be expected to exert pressure on licence holders to reduce their assignment fees or to remove restrictive clauses, such as automatic escalation in line with CPI or fare increases. This does not appear to be happening and may be a product of the fact that most operators are very small-scale businesses and, hence, in a position of limited bargaining power in respect of assignments.¹⁶⁶

Ultimately, in situations where there are strong cost pressures, as taxi operators exit the market licence holders would need to reassign relinquished licences to

¹⁶⁶ 2005 Taxi Fare Review: Final Report, p.46

other operators, and this would push down licence assignment fees to a level more affordable by operators, through a process of rationalisation.

In summary, the steadily increasing levels of licence assignment fees suggest an increasing scarcity value of licences. The current “Green Top” program releasing 100 extra plates per annum (or 2.2% of the fleet) does not appear to have been adequate to meet demand, as shown by the strong increase in licence values. Hence relaxing supply constraints to expand the release program is an important consideration. At the present time there is very little incentive for taxi drivers to become operators due to the exposure they have to the market power of licence holders.

7.2 Impacts of fare increases on industry participants

In its 2005 Review of Taxi Fares, the Commission concluded that poor returns to drivers and operators were due not to the absolute level of fares or inadequate total revenue but rather to the scarcity of licences and the market power wielded by networks and industry bodies and the consequential distribution of fare revenue between licence holders, operators and drivers. Given the current arrangements, fare increases would be unlikely to improve driver remuneration – instead generating windfall gains to licence holders.

The impact of a fare increase on taxi industry participants was examined in section 4.2 of the Interim Report. To summarise, the main observations:

- The increase in revenue resulting from a price increase depends on the elasticity of demand. There is limited information on the elasticity of demand for Victorian taxi services at the present time. An estimate of taxi demand elasticity has been made for the purposes of the analysis in this report, but should be considered as indicative only. It suggests that any revenue gain would be significantly smaller than the fare increase.
- It is reasonable to expect that very little of any revenue increase resulting from a fare increase would be retained by taxi operators, due to the workings of supply and demand for taxi licences. Most likely this revenue would be captured by licence holders through higher assignment fees than would otherwise be the case. However, given the high degree of concentration among depots/networks, and it is possible that some of the increase in revenue would flow to the depots/networks through higher network fees.
- Through the typical revenue sharing formula, taxi drivers may be beneficiaries of a fare increase, if the impact of higher fares on demand is limited, and overall revenue increases. However, it is also possible that driver incomes will not increase as much as expected, if the standard bailment arrangements are modified to reduce the effective driver share of revenue. For example, this is reported to have occurred after the 4.2% fare increase in March 2008.

Thus the expected effect of a fare increase on industry participants is that, while licence holders and possibly depots can be expected to benefit by having greater ability to push assignment fees and/or network fees higher, taxi operators may not obtain much benefit if assignment fees increase further in response to the fare increase. Driver incomes (and the incomes of operators in their capacity as drivers)

might increase proportionately with any increase in industry revenue under current bailment arrangements. However, given the relatively weaker bargaining position of drivers, there is a risk that drivers may not achieve some or all of this gain if bailment arrangements change.

For these reasons a fare increase is not considered to be an effective method of improving driver incomes.

7.3 Improving driver remuneration

As identified earlier, some of the key issues that give rise to relatively low driver incomes include:

- standardised bailment agreements, under which drivers are treated as self-employed sub-contractors rather than employees;
- the constrained supply of licences, resulting in a high proportion of profits being absorbed by licence holders. Were assignment fees lower, greater income could be shared by operators and drivers.

These are both influenced by the structure of the broader industry, and the regulatory constraints to entry. These enhance the scarcity value of licences, as well as enhancing the market power of licence holders and network service providers over other taxi industry participants.

Stakeholder views on improving driver remuneration are outlined in section 7.2.1. Options identified by the Commission for improving driver remuneration are discussed in detail in sections 7.2.2 to 7.2.7. In formulating these options that Commission has also had regard to the overall objectives of taxi industry regulation, as outlined in chapter 3, including improvement in service quality standards and customer satisfaction, and well as the availability and affordability of taxi services. Preliminary conclusions are summarised in section 7.2.8.

7.3.1 Views of stakeholders

There were varying views expressed on whether the terms of bailment agreements should be regulated in Victoria. Mr Wally Hunt suggested:

The Commission should consider banning any agreement which results in the driver retaining less than 50% of the total revenue. The driver's share should be increased by 2.5% per year for the next five years. This would reflect the decline in real terms of the cost of owning and operating cars over the last 20 years ...

Mr Griffiths suggested:

Drivers should get 60% of the fare, with the extra 10% accounting for holidays, super etc

The VTA argued:

The issue of mandated bailment agreements is linked by the ESC to that of securing favourable salary outcomes for taxi drivers (page 56). This is an unusual position taken by a regulatory body

since in other parts of the economy salary levels are left to markets with supplementation of salaries regarded as low by community standards being achieved not on an industry basis but via the government tax-and-transfer mechanism.¹⁶⁷

In many industries, award wages are subject to regulation by industrial tribunals. In NSW, taxi bailment agreements fall within the jurisdiction of such a tribunal. Some other jurisdictions regulate aspects of the bailment agreement, by setting maximum shift pay-in amounts.

VCOSS expressed the view that altering the current system is needed to:

- *Provide quality employment which allows for sick leave, superannuation and holiday leave*
- *Improve retention of skilled drivers; and*
- *Increase the financial viability of providing additional training to drivers who transport passengers with additional needs (including conventional cabs)*

7.3.2 Options involving directly increasing drivers' revenue share through controls over bailment agreements

Options for increasing the share of revenue received from drivers through direct controls over bailment agreements include:

- encouraging fixed pay-in terms and establishing maximum pay-in amounts
- mandating income shares within revenue sharing arrangements or
- hypothecating income from specific charges to drivers.

Regulated pay-in conditions

The Issues Paper presented an inter-jurisdictional comparison of bailment arrangements which showed that Victoria's bailment arrangements are similar to those in Queensland, SA, the ACT and NT.

By contrast, the NSW Industrial Relations Commission (**IRC**) sets the pay-in conditions through a Contract Determination, which governs the agreement between operators and drivers in Sydney. Since it was first made in 1984, the Contract Determination has been varied by the IRC on a number of occasions. Drivers can choose between one of two available methods, which are set out in a determination by the IRC:¹⁶⁸

- Commission: drivers retain a certain percentage of the chargeable fares (i.e. meter takings). The percentage figures for first and second-year drivers are 45% and 50% respectively. (This method is common in country areas, but uncommon in metropolitan Sydney).

¹⁶⁷ p.14

¹⁶⁸ NSW Office of Industrial Relations website 2007

- **Set Pay-in:** drivers are entitled to retain from chargeable fares the balance left after deducting an amount paid by the drivers to the operators. The maximum pay-in amount is set by IRC, and varies with the type of shift and the day of the week. The fixed pay-in method is used widely in the Sydney market.

Fixed pay-in arrangements are also used widely in Perth, and again there are regulated maximum shift pay-ins.

Both methods provide permanent drivers with annual leave, sick leave and long service leave, although recent IPART and IRC reviews have indicated that entitlements to drivers are more often than not traded off by drivers (even permanent drivers) for higher pay.

The benefits of the fixed pay-in method are that it provides certainty of revenue to the operator and encourages drivers to operate the cab efficiently to maximise returns, because the driver keeps all of the residual income net of fuel costs (rather than 50% of revenue under the 'Commission' method). The fixed pay-in approach also improves the remuneration of more experienced or productive drivers, while discouraging new drivers, who do not have the skills and knowledge to maximise fare revenue.

Mandating income sharing in bailment agreements

In Victoria, bailment agreements are not regulated by the Government. At present the taxi industry bailment agreement revenue sharing formula appears to be strongly influenced by central directives of the VTA, presumably in conjunction with the major depots. An alternative would be for the standard income sharing formula to be determined by a regulatory authority.

Problems with this approach would include identification of the appropriate regulatory body and availability of sufficient expertise to establish an appropriate rate of revenue sharing. The Commission's role as an economic regulator would not normally extend to advising on wage rates. The VTD is primarily a regulator of service quality and safety standards. Victoria comes under the Federal industrial relations jurisdiction, and therefore, perhaps the appropriate regulatory body would be the Australian Industrial Relations Commission.

Hypothecating income from specific charges

A further alternative would be to hypothecate different parts of the fare schedule to drivers. As an example, under the current regulated fare structure, the metropolitan late night surcharge is to be paid entirely to drivers, overriding any conditions within individual bailment agreements. In country areas, the New Years Eve surcharge has also been directed to drivers (although it only applies for one night of the year).

This approach could be extended further to partially or entirely apportion different fare components, such as the flagfall, detention and distance rates, between drivers and operators. Such an increased regulatory approach would necessarily take precedence over any distribution set out in bailment agreements.

Ultimately this approach is similar in its implications to mandating revenue shares. Underlying any calculations of this kind would be assessments of appropriate minimum wage standards, which may be problematic for a taxi fare regulator. It is potentially less flexible than mandating revenue shares, implying greater risk of

unintended consequences because it could easily become mis-aligned with appropriate revenue shares over time.

Commission preliminary assessment of options for direct regulation of bailment agreements

The imposition of tribunal regulation of bailment agreements through the setting of maximum pay-ins for each shift or mandating the revenue sharing would represent a significant market intervention. Such an increase in regulation would need to be justified under NCP requirements.

Moreover, the Commission is concerned that if the intent of policymakers is to improve driver remuneration, then regulating bailment agreements could lead to increased cost pressures on operators. In the absence of other offsetting cost reductions, or an increase in fares, increasing the percentage retained by drivers (whether directly or by increased hypothecation) would improve driver remuneration but would reduce operator revenues.

Without addressing the market power levied by licence owners such options may not provide a satisfactory solution. They could be undertaken in conjunction with initiatives to curb licence assignment fees (which are considered in the following section). However it is important to weigh the need for increased regulation against less intrusive options for improving the revenue share of drivers.

7.3.3 Increasing driver incomes indirectly through improved training

An important factor that puts downward pressure in taxi driver incomes, and weakens their bargaining position when agreeing bailment terms, is the surplus supply of relatively unskilled drivers available. The process of cost minimisation and driver turnover can result in reductions in the average levels of driver skills. However, driver skills are an important factor in customer satisfaction, so that this process can erode the market position of taxi services. Customer satisfaction surveys have regularly highlighted that improvement in driver skills is a key area on which the industry should focus.

While there have been some recent initiatives in relation to driver training, including an increase in the training requirements from 90 hours to 115 hours, further increases in the training requirements for drivers remains an important area for further consideration. Requiring a greater amount of training by new drivers will increase the costs of entering into the industry for new drivers, and by doing so, will strengthen the bargaining position of experienced drivers. It therefore can be expected to contribute to improved driver remuneration. Such training might play a particularly important role in Victoria, given that the current structure of bailment arrangements provides less incentive for experienced drivers to remain in the industry compared to some other jurisdictions, such as NSW.

In addition to this benefit, increased training requirements directed to improving customer service skills, would also benefit taxi customers, and thereby improve customer satisfaction. For example, one area suggested for increased driver training is in regard to improving driver skills in providing services to disabled customers.

The Commission therefore considers that increased driver training requirements would have benefits to both drivers and customers.

7.3.4 Increasing driver incomes indirectly through increased transparency of bailment agreements

The available research suggests that there is considerable uncertainty in relation to how many drivers have signed bailment agreements. In these circumstances there is some uncertainty in relation to whether some drivers are employees or contractors. There is also evidence that central industry bodies have a significant coordinating role, and taxi operators appear to have an ability to unilaterally vary bailment terms and conditions.

In these circumstances there may be benefit in greater transparency in relation to bailment agreements.

Under the accreditation regulations each taxi operator must retain information in respect of 'the contents of the bailment agreement with each bailee driver to whom the taxi-cab is bailed that is either in writing or evidenced in writing'. There may be benefit in requiring that a central register of bailment agreements be maintained, to provide greater certainty that the terms and conditions on which taxi drivers have been engaged are actually formalised in a contract. There may also be benefit in requiring a documented record of the alternative bailment options that were provided to the driver.

Industry performance monitoring could then provide aggregate information on the types and average terms of bailment agreements in the marketplace.

To this end, greater transparency for bailment agreements may be of merit, with possible measures including registration of all agreements with the Victorian Civil and Administrative Tribunal, the VTD or a separate government agency, or by providing for collective bargaining by drivers to increase their power in negotiations.

7.3.5 Options to directly reduce licence holder incomes through controls over licence assignment fees

In order to improve driver incomes it would be necessary to ensure that a greater share of revenues accrue to taxi operators and drivers. Options for doing this include introducing regulatory controls over assignment fees, or restrictions on the types of persons who can hold a taxi licence. Assignment fees could be regulated by introducing an upper limit on these fees. Also, in some States there are restrictions on who can hold a licence – such as a person with an active involvement in the industry.

Regulatory controls of this kind have been adopted in Western Australia where the government has set a maximum plate lease fee¹⁶⁹. WA also imposes a maximum

¹⁶⁹ Giffard, G. 2003, *Report on Review of the Taxi Industry Regulatory Structure in the Perth Metropolitan Area*, Department of Planning and Infrastructure, Western Australia, June, p. 15.

pay-in rate for driver bailment agreements, which varies dependent on the shift. Thus, for operators, the amount they pay as an assignee is regulated, as is the amount they receive as a bailor. Controls over licence assignment fees and maximum shift pay-in are seen as being closely linked. The rental for newly issued licences is also at a significant discount to the capped level of assignment fees, which further reduces costs and enhances the incomes of taxi operators and drivers.

A recent review of taxi regulation in Tasmania has concluded:

While there was little support for regulation of the content of leases (as this was seen as a commercial arrangement between an owner and a lessee) there was some support for the regulation of the maximum amount able to be charged by a licence owner. This would ensure some certainty for operators in terms of managing their businesses, and would ensure that lease rates could not get so high as to severely diminish returns to operators and drivers to the extent that the business becomes marginal.¹⁷⁰

Such a cap would potentially dampen the demand for licences by limiting the income that licence holders can earn, which would reduce the value of the licence. Returns to licence holders would be reduced both in terms of income flows from assignment fees and the future value of the taxi licence.

A cap could be implemented in the form of:

- a fixed dollar amount, e.g., \$20,000 pa; or
- a fixed proportion of fare income.

In addition to imposing a cap on assignment fees for pre-2002 licences, the rental on newly released licences would be significantly discounted from the cap.

Fixed dollar cap

A fixed dollar cap would result in a re-distribution of fare income away from licence holders to operators and potentially drivers. With no increase in fares this redistribution of income will only improve remuneration for drivers if their agreements with operators provides for a change to the standard 50/50 split of gross fare revenue¹⁷¹, or if separate regulation of bailment agreements is imposed. In the absence of such a change any benefits from a cap on assignment fees, with fares remaining constant, would flow to operators.

If a cap on assignment fees is introduced in combination with an increase in fares this should result in an increase in remuneration for both operators and drivers, depending on the price elasticity of demand. If revenue increases as a result of a fare increase, then the standard 50/50 fare splitting arrangement between drivers and operators will ensure that driver remuneration improves. By capping

¹⁷⁰ Department of Infrastructure Energy and Resources (August 2006) 'Paper 9 – Review of Perpetual Licensing', pp. 60-61

¹⁷¹ PwC 2008, Review of Victorian Taxi Costs.

assignment fees, operator remuneration will improve as the licence holder's ability to capture fare increases through raising assignment fees will be limited.

The difficulty with this approach is determining the appropriate assignment fee and a mechanism for it to be reviewed. In WA the licence fee cap is adjusted for inflation each year.

Fixed proportion of fare revenue

An alternative approach is to cap the proportion of fare revenue that is paid to licence holders. The impact on drivers and operators would be similar to a cap, as discussed above, however under this arrangement licence holders' returns will be more directly linked to fare levels and industry performance in terms of trips per cab.

This would have the advantage that licence values more closely reflect available returns rather than being based on the holder's ability to extract value through rises in assignment fees. On the other hand licence holders would be affected by licence release programs, possibly complicating the issue of compensation.

The proportion of revenue approach to capping assignment fees may be well suited to a context where the proportion of the fare that is paid to drivers is also regulated. By regulating the distribution of fare revenue there is the potential to improve driver remuneration without creating pressure for fare increases. (Again compensation issues may become relevant).

If regulation of taxi fare revenue distribution is introduced the challenge will be in identifying what proportion of revenue operators, licence holders and drivers should receive.

Controls over licence assignment

One option to be given further consideration by the Commission was put forward by taxi driver Mr Griffiths:

A simple solution is to return to pre Foletta conditions, and require that investors operate a car. They could have this managed by a depot, this would be a simple reform that would simply put the investor return at the end rather than the beginning of the profit cycle.¹⁷²

Proposals to limit who can hold a licence (e.g. only a taxi cab operator) would narrow the buying side of the market, and therefore inevitably affect licence values. However, it need not reduce the rent captured by licence holders and there would be less transparency within which to make such an assessment.

Ultimately it is the scarcity value of the licence which will be the primary determinant of the degree to which the licence holder can capture rent. This view is borne out by the market outcomes under the BSX taxi licence trading market. One of the reasons put forward for introducing that market was to prevent 'the current

¹⁷² Mr David Griffiths submission.

practice whereby assignment contracts are “bundled” with motor vehicle purchases (or other assets)¹⁷³, in order to improve the efficiency of the taxi licence trading market. It was also maintained that a benefit of the improved transparency ‘is likely to be a reduction in assignment fees, reflecting a ‘true’ equilibrium price and representing, in large part, a transfer from licence owners to assignees’¹⁷⁴. Instead, assignment fees have steadily increased, but with a more liquid market, there has also been a strong increase in the ratio of licence value to assignment income.

Therefore, narrowing the buying side of the market may impact on traded licence values, but need not impact on rents to licence holders.

Commission assessment of controls over licence assignment fees

The adoption of controls over licence assignment fees in Victoria would be a significant intervention, and by implication it would need to be demonstrated (in accordance with National Competition Policy) requirements that the benefits of increased regulation outweigh the costs, and that there is not a less intrusive option to achieve the same objective.

At present licence assignment fees represent a transfer of economic rent from consumers and other industry participants to licence holders amounting to approximately \$100m per annum. There is also an associated deadweight loss from reduced demand because higher fares are needed to cover the cost of licence rental. Assuming the licence rental cost represents 16.4% of the final price¹⁷⁵, and assuming a demand elasticity of -0.5, the deadweight loss due to licence assignment fees would be approximately \$35m per annum.

Clearly there is potential to ameliorate some of this deadweight loss and also re-distribute some of the rent to the benefit of drivers (away from licence holders), by adopting controls over licence assignment fees.

The Tasmanian review commented that:

It could be argued that the main cost of such a restriction would be on the licence owner ... On the other hand there would be significant benefits to both the public and to the industry through lower lease fees due to improved returns to operators and hence greater opportunity for fare discounting and improvements to service levels.¹⁷⁶

A reduction in assignment fees would reduce operator costs and potentially allow an improvement in driver remuneration. Owner drivers would benefit directly. However bailee drivers would be reliant on the operators passing on some of the benefit of reduced costs. Alternatively controls over bailment agreements could be

¹⁷³ ‘Regulatory Impact Statement: Transport (Taxi-Cab Licences – Market and Trading) Regulations 2005’, Prepared for the Department of Infrastructure Transport Legislation Review Project, p.6

¹⁷⁴ Ibid., p.62

¹⁷⁵ Based on the PwC 2007 survey

¹⁷⁶ Department of Infrastructure Energy and Resources (August 2006) p.61

introduced at the same time, to ensure that the benefits of reduced assignment fees flow through from operators to drivers.

While the WA arrangements appear to have been successful in improving driver remuneration, there still appear to be driver shortages due to the tight labour market conditions in Perth. In addition, the Commission notes that Perth taxis are seen to be in short supply, and that the government is planning to release more licence plates to remedy the shortage. This illustrates the importance of having an appropriate number of taxi licences in play, to keep demand and supply for taxi services in balance and hence ensure acceptable standards of service in terms of waiting times.

If instituted in Victoria, controls over licence assignment fees would constrain the process of offering assignments through the BSX Taxi Market, and it should be expected that licence values would fall as a result of the increased regulatory intervention.

Therefore it would be necessary to consider the issue of equity and fairness to those who bought licences at a higher value prior to controls over licence fees being foreshadowed. Any safety net provided would be in the form of a licence buyback program, where a licence holder could sell a licence to the Government at the same price they paid for it.

If offered, the cost of providing a safety net would be higher for greater reductions in the licence assignment fee, which would effectively limit the degree to which licence assignment fees could be reduced. The rental fees paid to the Government on post-2002 and newly issued licences would provide a useful source of funding for licence buybacks.¹⁷⁷

The Commission believes that implementing controls over licence assignment fees has the potential to improve driver remuneration, particularly if accompanied by other initiatives that could be expected to improve the driver share of revenue. However, this represents a substantial increase in the amount of regulation, and careful consideration is required as to whether improvements in driver remuneration can be achieved by other means, as discussed below.

7.3.6 Options to indirectly reduce licence holder incomes by increasing the number of licences

Increasing the number of licences

A significant distortion to the distribution of income within the taxi industry comes as a result of entry restrictions, which enshrine and reward rent-seeking. Moore and Balaker note that “rent seeking plays a large role in taxi market regulation”¹⁷⁸. They make a general observation based on international studies that:

¹⁷⁷ Estimation of the income at \$8m per annum, based on \$5,000 per annum for 375 WATs, \$15,000 for conventional taxis (i.e. 300 converted peak licences), and \$5000 for the remaining 300 peak period licences. This could be securitised to form a pool of approximately \$150m.

¹⁷⁸ Moore, A.T. & Balaker, T. 2006, op cit, p. 111.

Entry restrictions, combined with the independent-contractor system for drivers, means that taxi license owners make good profits off each license while leaving the drivers to bear most of the financial and customer-service risk and liabilities.¹⁷⁹

Increasing the release of licences reduces the scarcity rent attaching to licences and would thereby reduce cost pressures on taxi operators to the extent that assignment fees also decrease. Reduced customer waiting times as a result of an increase in the number of cabs available tends to stimulate demand, and thereby compensate operators, in part at least, for the increased number of cabs in operation. This stimulus to demand arises because of the high cost of waiting time to users, and the existence of unmet demand.

The 2002 National Taxi Users Survey found that in Victoria 30% of customers indicated that on some occasions in the preceding 6 months they had been unable to get a cab. Moreover the cost to users of waiting time is high¹⁸⁰, suggesting that long waiting times may be discouraging some demand. Thus insufficient growth in the number of licences can be expected to lead to deterioration in response times and other taxi service attributes. This can in turn discourage demand – so that observed demand levels do not provide a clear indication of the potential levels of demand that would arise with a greater supply of cabs.

However, it has been suggested that the loss of entry restrictions could have an adverse effect on driver income. As Kang argues:

[The] market niche for taxi services is commonly small and more likely to contract than expand. Consequently, the increases in the number of taxis are not accompanied by the increases in the demand for taxi service. Instead, they lead to decreases in the productivity of industry in terms of the number of trips per cab per hour operated. The reduction of productivity certainly result in less revenue and lower profitability for the operators, unless the level of fares does not rise. However, profitability did not increase even in the case of fare increase in some countries. This can be explained with the increased competition which restricts increase of fares to compensate the loss of revenue. Reduction of profitability may also affect the quality of service as well as drivers' working conditions and wages.¹⁸¹

However, this represents only one view of how the industry would perform in a deregulated environment.

¹⁷⁹ Moore, A.T. & Balaker, T. 2006, 'Do Economists Reach a Conclusion on Taxi Deregulation?', *Econ Journal Watch*, Vol. 3, No. 1, January, p. 111.

¹⁸⁰ For a summary of estimates of the cost of passenger waiting time see: Victorian Competition and Efficiency Commission (2006) 'Making the Right Choices: Options for Managing Transport Congestion', pp. 44-46

¹⁸¹ Kang, C-H. 1998, *Taxi Deregulation: International Comparison*, Dissertation, University of Leeds, August, section 5.2.4, <http://www.taxi-library.org/kang0898.htm>.

An increase in the supply of licences would improve service levels and response times. It would also ensure that the supply of licences better matches the potential demand at those improved service standards. It is reasonable to assume that the significant improvement in response times and the ability of passengers to switch from other modes of transport to taxis, would induce additional taxi trips.

When the reduction in licence assignment fees and the stimulus to demand are both taken into account, operators and drivers are unlikely to be made worse off by increasing the supply of licences. Driver incomes would be underpinned by the increased demand for drivers, which, if anything should put upward pressure on driver incomes.

It should not be assumed that driver incomes will necessarily be determined by current bailment income sharing arrangements. As recent events have demonstrated, these revenue sharing arrangements can readily be changed, and/or a greater use of fixed pay-in methods could be adopted. In short, it should be assumed that driver remuneration will be determined by the balance of demand and supply in the market for taxi driver services, and increased demand is more likely to support driver incomes than otherwise. A greater number of taxi licences would tend to strengthen the bargaining power of drivers.

Furthermore, a program of releasing new taxi-cab licences to taxi drivers provides for the advancement of experienced taxi drivers to become taxi operators. As an example of this kind of approach the Government's 2002 reforms sought to encourage more drivers to own and operate their own taxis. Only drivers who had served in the industry for at least five years were eligible for the 'green top' licences. As previously detailed, these licences are restricted, in that they cannot be traded, nor can they be assigned. Whoever leases the licence from the government must be responsible for the operation of the taxi. Given, however, that there are approximately 15,000 active drivers across the state, there are only limited opportunities for most drivers to operate their own taxi business.

Approaches to issuing more licences

One option, which was adopted by the ACT government in 2002, is to utilise a market based mechanism for issuing new licences. In that jurisdiction, new licences are offered each year by way of an auction. The number of new licences to be released is initially set at 5% of the existing number of licences. Where demand for licences is high and the auction price exceeds 95% of the market value for licences, an additional 5% is released (that is to say, 10% of the existing number of licences will be offered). If, however, demand is low and bids do not reach 90% of the market value (the reserve price), then no licences are issued. In the first year of the scheme, an independent market valuation was used to determine what the reserve price should be. In subsequent years, the market value has been taken as the average price for which licences sold at the previous year's auction. Where no licences have been sold in the preceding year, the reserve price is set at 90% of the previous reserve¹⁸². However, this scheme did not prove to be effective in increasing the supply of licences, and the ACT has abandoned this

¹⁸² Independent Competition and Regulatory Commission (ICRC) 2004, *Determination of taxi fares for the period 1 July 2004 to 30 June 2007*, Final Report, Canberra, May, p. 73.

scheme in favour of using broad indicators of taxi demand, such as waiting times and population growth.

A related approach could be to link the number of licences issued to a performance indicator such as waiting time or unmet bookings, or a demand indicator such as taxis per head of population. The relationship between licences and population is an often cited measure of demand for taxis, although as KPMG notes, an imperfect one¹⁸³. Different cities each have their own transport systems in place, leading to different preferences for travel. Nevertheless, within one city or state over time, maintaining a given ratio of taxis per person would allow the number of licences issued to keep pace with population growth.

Performance indicators are increasingly being seen as an appropriate trigger for the licence release program. If the key performance indicators of service quality are not met, then more licences are issued. This is essentially the approach taken in WA, where the indicator “jobs not covered” is used. If performance against the target is not met, this forms the basis of decisions to release more licences.

In keeping with existing policy, new licences would only be leased from the government, and could not be assigned or traded. In WA, new licences are released at a discounted fee, which again benefits the incomes of operators and drivers. Restricted licences, such as area restricted licences or WATs are issued at 40% of the fee applying to conventional taxi licences.¹⁸⁴

Under this option, licences would be released if pre-specified performance targets are not met. Relevant performance targets for conventional taxi services may include waiting times in peak hours and jobs not covered. Relevant performance targets for accessible services would be the performance outcomes for conventional taxi services.

Once the target performance measures are achieved, licences would be issued only to maintain that performance level over time.

A challenge is identifying the appropriate performance target in the first instance. A failure at this initial step could have adverse consequences, either impacting on consumer welfare (if set too low) or driver and operator income (if set too high).

This approach would be in keeping with the Government’s previously announced approach in its 2002 taxi industry reforms. The Government’s reform package in 2002 contemplated a ‘transition along the continuum from a highly regulated industry to a more lightly regulated one.’¹⁸⁵ It also stated that:

These reforms do not represent the end point of reform. It is expected that further reforms may be required over time. ...

¹⁸³ KPMG Consulting 1999, op cit, p. 53.

¹⁸⁴ Giffard G (June 2003) ‘Report on Review of the Taxi Industry Regulatory Structure in the Perth Metropolitan Area’, p.37

¹⁸⁵ Department of Treasury and Finance (2003) ‘Report on Victoria’s Implementation of National Competition Policy’, p.92

*Additional 24-hour taxi licences are to be issued if performance does not meet the standards.*¹⁸⁶

It is also in keeping with the key principles for taxi industry reform established by the National Competition Council (**NCC**)¹⁸⁷:

- A regular program of releasing new taxi licences. The formula for releasing new licences should be stable and predictable.
- Monitoring of the reforms and review, with additional action if the demand and supply balance is not improving. The NCC indicated that it regards licence values as the key indicator of whether there is an imbalance in the supply and demand for licences. There might be a release of additional licences if certain previously specified benchmarks are not met.
- Reform of other chauffeured passenger transport (which is now completed in Victoria)
- Commitment to a staged release of licences, by announcing the program and making the underlying objectives clear, establishing verifiable performance indicators, and providing scope for monitoring effectiveness and developing the program as necessary.

In summary, were licences to play a less prominent role in terms of the overall industry cost structure, it is conceivable that the remuneration of taxi operators, and potentially drivers, would improve by reducing the substantial cost impost of licence assignment fees. The increased demand for drivers relative to the available supply, and – where licence releases are preferentially directed to taxi drivers – the increased opportunities for drivers to become operators in their own right, would underpin driver pay conditions and provide greater opportunities for advancement.

Possible compensation arrangements

The effect of issuing more licences would be to reduce demand for assigned licences which would lead to a decline in assignment fees and hence licence values.

Previous reviews have considered in detail the options for compensation. While some have considered full compensation to all licence holders, others have questioned whether there is any legal requirement for compensation at all. Indeed, other jurisdictions that have deregulated have each approached the issue of compensation in their own way. The Northern Territory fully compensated licence holders in a 'buy-back' of their plates. New Zealand by contrast opted not to pay any compensation at all. Ireland established a Hardship Panel to provide adjustment payments to individual licence holders on a needs basis¹⁸⁸. Western

¹⁸⁶ Ibid, p.92

¹⁸⁷ See Giffard G (June 2003) 'Report on Review of the Taxi Industry Regulatory Structure in the Perth Metropolitan Area', Appendix 1

¹⁸⁸ Bekken, J-T. 2005, *Experiences with (De-Regulation) in the European Taxi Industry*, Oslo, February, presented at the OECD/ECMT Transport Research Centre round table 2007, '(De)regulation of the Taxi Industry', Paris, March, p. 50.

Australia offered to buy back licences at the prices that licence holders paid for them.

One of the more detailed proposals for addressing the issue of compensation emerged in the ACT. The Independent Competition and Regulatory Commission (ICRC) proposed a 'safety net' scheme to offer adjustment assistance based on how long any given licence owner had held their plate. The rationale for this approach was that the longer a person had held a licence the greater the returns they would have received to cover whatever cost they incurred in obtaining the licence. More recent investors into the industry would therefore be eligible for higher compensation, although the scheme was to be structured to exclude people who bought a licence after the ICRC made the proposal – this was to prevent 'gaming' of the safety net¹⁸⁹.

The Commission previously assessed the issue of compensation in its 2004 Hire Car Review¹⁹⁰. In that case, the Commission was asked to review licence fees where a fee for new licences had only recently been gazetted by the government (at \$60,000 excluding GST). The Commission recommended reducing the licence fee, but recognised that owner-operators who had paid the higher rate since it had been introduced had legitimate reason to expect that the higher fee would be maintained for some time. As a result, it was recommended that for those who had purchased a new licence from the government at the \$60,000 fee would have the difference between that rate and the Commission's proposed lower rate refunded. Given that the secondary market for trading existing licences would also have been affected by both the introduction of the \$60,000 fee for new licences and the proposed lowering of that fee, the Commission considered how to address the concerns of operators who had purchased a licence through secondary markets during that time. The Commission recommended offering *ex gratia* adjustment payments to those owner-operators who had purchased a licence through the secondary market, to be assessed on a case by case basis. This approach to traded licences is similar in nature to Ireland's hardship panel for the taxi industry.

An alternative approach which has the benefit of simplicity and objectivity is the WA approach of offering to buy-back licences at the price the licence holder paid for it. In recent years most licences have been traded through the BSX market, which would assist to validate the purchase amounts. The majority of licence holders will have purchased their licences at values considerably lower than today's values. This will assist to limit the overall liability to the State if it were to make a buy-back offer in this form.

Commission preliminary assessment

In the Commission's preliminary view the performance indicator approach to determining the licence release program has potential benefits. In particular, it can be well directed to establishing the required number of taxi-cabs to satisfactorily

¹⁸⁹ Independent Competition and Regulatory Commission (ICRC) 2002, *Review of the future direction of the ACT taxi and hire car industry, and price direction for taxi services*, Final Report, Canberra, June, p. 44.

¹⁹⁰ Details of the recommendations for this are contained in Essential Services Commission 2004, *Review of Hire Car Licence Fees*, Final Report, June, pp. 64-65.

supply the peak demand services. This approach should contribute towards the objectives of both improving customer satisfaction and improving driver remuneration. It would also provide more certainty for industry about the future release of licences.

7.3.7 Options to indirectly reduce network operator fees through greater competition in network services

The requirement for all taxi operators to be affiliated with an approved depot, together with a restrictive test applied to the approval of depots by the VTD, has conferred a monopoly, or near monopoly franchises on incumbent network service providers. However, this has been done without any associated controls over network fees, or other forms of market conduct that may represent an exercise of market power, including the centralised control over ongoing bailment terms and conditions, and the exercise of quasi-regulatory powers over drivers.

Mr Hunt has observed:

The Commission should consider striking out the requirement for taxis to be affiliated with an “accredited network”, and only require taxi operators to be monitored for driver alarms. The networks should be mandated to supply alarm monitoring at not more than \$50 per month, plus \$25 per alarm activation. The taxi owners and drivers would then have the freedom to operate under the livery of a “Secondary Network”. Taxi owners should be free to contract their alarm monitoring to security companies like Chubb, or Courier networks.

Under the new accreditation processes there should be an emphasis on ensuring that there are no restrictions on the entry of network service providers or secondary networks within the approval processes. The application of less restrictive principles can be expected to provide a greater range of available options, and thereby reduce the network costs charged to taxi operators. This reduction in costs could potentially improve the remuneration of both operators and drivers.

7.3.8 Conclusions

Taxi driver remuneration in Victoria is low relative to other states and related jobs in other industries, and reflects a highly inequitable distribution of income throughout the industry. However, simply increasing what drivers must be paid will only result in a reduction of operators' income.

For this reason it is important to consider the relative bargaining power of each participant in the industry¹⁹¹. Drivers tend to exhibit low bargaining power, with bailment agreements largely pre-determined and offering little variation. Operators, however, also face limited market power. Operators tend to exist in a perfectly competitive environment in that there is a potentially unlimited supply of aspiring assignees for a limited number of taxi licences. This can be observed in the

¹⁹¹ This issue is examined in detail in Appendix D.

increase of assignment fees and licence values over time. As operators 'bid up' assignment values, they essentially 'bid down' their own profit share. Hence, any additional profits that might arise from increased revenue (i.e. higher fares) will result in increased returns to licence holders. An additional consideration is that depots have an oligopoly in metropolitan areas, which would tend to restrict any competition on network fees. The market concentration of depots is compounded by the requirement that operators must affiliate with an authorised depot.

The consequence of increasing driver income with all else kept constant is that some operators would be squeezed out of the industry. It is expected that higher costs for operators would consequently reduce demand to lease licences, which in turn would result in assignment fees falling. However, the degree to which any fall in assignment fees would offset the increased labour costs is ambiguous. Indeed, such arrangements would disproportionately affect smaller operators, who do not enjoy substantial economies of scale in their operations. It may also impact adversely on service quality.

The Commission has identified a number of options for improving driver remuneration. Some of these options involve an increased degree of regulatory intervention in the industry. Others involve less regulation, while some of the options do not represent a significant increase or decrease in the degree of regulation.

Specifically the draft report has considered:

- forms of intervention that may represent an overall increase in the degree of regulation. These include direct controls over the terms and conditions of bailment agreements; controls over licence conditions or licence assignments that would affect the share of income received by licence holders; or the allocation of revenue from specific fare elements to specific parties
- options involving reduced regulation, including reduced constraints on the supply of licences through an ongoing performance-based licence release program, and the removal of regulations which require drivers to be affiliated with a network and/or inhibit greater use of secondary networks.
- other options which include increasing the degree of transparency surrounding the terms of bailment agreements and the market conduct in the relationship between drivers/operators and depots, as well as enhanced driver training requirements.

It is important to ensure that the policy response is proportionate, and that the regulatory burden on the industry is not unduly increased. Overall the Commission's preference is for the minimum degree of regulation sufficient to address the market failure in question. For this reason, there is benefit in considering a combination of initiatives, some of which may involve a greater degree of regulation, while others involve reduced regulatory constraints. The overall balance in the package of options should minimise the overall impact of regulation on the industry.

This proposal to consider a balanced package of options is in keeping with the Commission's overall conclusions (discussed in chapter 10 of this report) for

carefully managed deregulation as the general direction for regulatory reform in the industry.

The Commission's preliminary view is that caution needs to be exercised in relation to the options for direct regulation of driver employment conditions. Such approaches may be difficult to administer and of uncertain benefit to the industry. In relation to bailment arrangements, the Commission sees merit in options such as greater transparency in relation to bailment arrangements, and possibly regulatory or judicial oversight of contractual arrangements.

The Commission's preliminary preference is for additional taxi licences to be issued through a performance-based licence release program. This would reduce the unnecessary costs associated with plate leasing that assignee-operators currently face, and provide greater capacity for driver remuneration to be improved. This would also improve the supply of taxis and thereby reduce waiting times and improve service levels, which would be well directed to improving customer satisfaction levels. By lowering industry costs and improving service standards it would also stimulate demand for taxi and driver services. Also, a known program will provide transparency and certainty for investors.

Increasing driver training requirements would also improve customer service standards while at the same time improving driver remuneration by altering the balance between the demand and supply of drivers.

The Commission also favours the capping of licence fees. Already these fees are imposing a substantial cost burden on the industry. In the absence of such controls there is a risk that the benefits of other reforms that are pursued would flow to licence holders. Under a framework in which assignment fees for pre-2002 licences are capped, the rental fees on newly released licences should be at a significant discount to the cap, in order to further reduce industry costs. Compensation to existing licensees should be considered, such as an open offer to buy back licences at the prices that existing licence holders paid for them.

The Commission has identified a number of options to improve driver remuneration, and invites comment on all of these options, and in particular the preliminary preferred options of:

- Increased transparency in the development, negotiation and conduct of bailment agreements.***
- Increasing the number of licences to achieve specified performance targets or according to a market mechanism. Preferentially directing these to experienced drivers.***
- Relaxation of the accreditation of network service providers/depots.***
- Enhanced driver training requirements***
- capping licence assignment fees through a fixed dollar cap or as a proportion of fare revenue, with an associated buy-back program.***

8 INFORMATION GATHERING & PERFORMANCE MEASUREMENT

The terms of reference direct the Commission to report to the Minister on information reporting by the taxi industry and performance measurement.

In considering these issues, the Commission has had regard to recent amendments to the *Transport Act 1983* which introduced an accreditation scheme for the taxi-cab industry, and the supporting regulations which establish requirements in relation to the retention of information by the industry, as well as business and service standards.

8.1 Purposes of information gathering

Information from the taxi industry is required by a number of different government bodies and stakeholders for a range of different reasons. The three main government bodies involved are the ESC, VTD and the Department of Transport (DOT). Each performs a different role and therefore collects information on the taxi industry from a slightly different perspective:

- *economic regulation.* The ESC has responsibility for providing recommendations on fare adjustments and fare adjustment mechanisms. For this it requires measures of taxi usage, the costs and revenues of taxi operations, the distribution between industry participants, and service quality measures;
- *service standards and entry regulation.* The Victorian Taxi Directorate (VTD) is part of the Public Transport Division of the DOT (formerly DOI). It regulates the operations of the taxi industry and is responsible for the new accreditation process. It is responsible for implementing initiatives to improve the quality of services provided by the taxi industry. It is therefore interested in many aspects of the performance of taxi operations, including quality of service, customer satisfaction and complaint handling; and
- *Government policy and strategy agency.* The Department of Infrastructure is responsible for transport planning and requires comprehensive information on the levels and profiles of demand and any emerging trends in this area.

Information gathering should be driven by these requirements. Therefore the Government must decide what performance is to be measured, and the information that is to be publicly reported. A framework should also be established for the information requirements and process of information collection to be undertaken when setting fares. This will better enable the collection of data to support these requirements.

However the amount of information gathered should not be excessive, or impose unnecessary costs on the industry. At present very little information is collected

from industry participants, and this has presented ongoing policy and regulatory and policy problems. Nonetheless, caution needs to be exercised to avoid a response which results in excessive amounts of information collected.

The new industry accreditation scheme that has recently come into effect is aimed at improving information retention and gathering. Consideration needs to be given to the specific information that will be collected from taxi operators and network service providers. This requires assessment of the specific information needed to enable improved monitoring of industry performance against agreed key indicators or benchmarks.

The Commission's view is that there needs to be a well defined information gathering process, as well as regular public reporting in the form of an industry performance monitoring report. This chapter presents preliminary views on how each of these needs can be most effectively implemented.

The following section (8.2) examines the sources of information that are (or will be shortly) available. Section 8.3 then examines options for measuring performance and setting performance targets. The discussion includes consideration of the taxi industry performance measuring schemes that have been introduced in other Australian jurisdictions, specifically NSW, WA and the ACT. Section 8.4 briefly discusses two further needs for information: assessing licences releases and transport planning more generally. Conclusions are summarised in section 8.5.

8.2 Information collection

In undertaking this Review the Commission has identified a number of sources of information on the taxi industry. While these sources are incomplete, and provide limited information on a number of aspects of the industry's operations, the arrangements for accreditation will increase the significantly the amount of information available.

The main information sources are:

- the quarterly customer satisfaction monitoring survey carried out by DOI (now DOT), and some 'one off' surveys carried out by VTD, for example of taxi drivers and in relation to the quality of service for passengers with disabilities, both in 2006.
- the periodic surveys of taxi operators and drivers undertaken by the Commission to support its fare reviews

To supplement this information the Commission requested information from the metropolitan taxi networks in relation to bookings, types of services, number of taxis and waiting times. This information has only been partially provided to date. When complete it will compliment that collected through the VTD Taxi Driver Survey and the Customer Satisfaction Monitoring Survey, to provide some different insights into taxi supply.

New sources of information that are not available for this Review, but which will be available in the near future include:

- the Victorian Integrated Survey of Travels and Activity (**VISTA**) which is currently being carried out, and
- information that it will be more readily sourced from the taxi industry under the new accreditation arrangements.

8.2.1 Customer Satisfaction Monitor

In 2004, the DOI introduced the taxi customer satisfaction monitoring survey, which is undertaken quarterly. These surveys seek to determine how adequately the quality of taxi services meet customer expectations. A limited amount of information from this survey has been published in the DOI newsletter, *Track Record*, which reports on the performance of all forms of public transport. However, a comprehensive report has been provided to the DOI at the conclusion of each survey. If published this report would provide an excellent source of information on customer satisfaction.

Given the large amount of data that is collected through the current taxi services customer satisfaction survey it should not be necessary to collect additional information for conventional taxi services. However, it would be appropriate to supplement this survey with some more targeted sampling of MPTP members, and among these wheelchair users, in order to be able to provide robust comparisons of satisfaction between these groups.

From the range of questions asked it is possible to report the level of satisfaction by different customer groups. For example, it should be possible to determine the level of customer satisfaction:

- For MPTP members and non-members;
- By broad geographical areas (e.g. inner and outer Melbourne),
- Other relevant breakdowns

At present the customer satisfaction survey covers only metropolitan services. Consideration should be given as to how to ensure that country services can be included in this data collection process. The nature of the services that are provided in country areas are somewhat different, and it is important that regulators have an understanding of what is occurring in these markets.

The Commission's preliminary view is that a wider set of findings from the customer satisfaction survey data should be publicly reported. For example, the publicly reported information might include:

- the percentage of those surveyed who are non-users
- among the users, the average frequency of use and the profile of the purposes the most trips of respondents
- overall customer satisfaction with taxi services, as well as satisfaction with each of the elements of service, for example, as set out in Table 2.9
- proportion of those surveyed wanting to make complaints, those who made a complaint and who to, and satisfaction with how the complaint was handled
- the foregoing information for MPTP members and for wheelchair users.

The Commission's view is that an overall performance monitoring report would be an appropriate place to report the information from the customer satisfaction monitor.

8.2.2 Accreditation arrangements

Under section 11 of the *Transport (Taxi-cabs) Regulations 2005* taxi operators are required maintain records of revenue earned, kilometres travelled, the number of hirings, operation and maintenance costs, driver details and any other information required by the terms of the licence. This data must be kept at an address approved by the licensing authority for a period of at least three years. Records must be made available for inspection upon demand to a member of the police force or licensing authority.

There is no evidence to suggest that this data is reported to or collected by a central body on a regular basis. It is assumed to be kept by taxi operators and to be made available if required. Therefore, the industry should have much of the information required for performance monitoring purposes, but a reporting system needs to be introduced.

The information collected by the industry is to be further enhanced under the new accreditation regulations. Taxi operators and licence holders will be required to keep a large amount of detailed information regarding their operations.

Sections 6, 7 and 8 of the recently introduced *Transport (Taxi-cab Industry Accreditation) Regulations 2007* require licence holders, operators and network service providers to collect information related to their operations. The information relates to the level of service provided, revenue and costs associated with providing a service and complaint handling processes. Some of the data that operators are now required to collect includes:

- Days and the times when each taxi-cab was available for hire;
- Revenue earned during each shift;
- Total kilometres travelled during each shift;
- Number of hirings of each taxi-cab during each shift;
- Costs incurred in operating and maintaining the taxi-cab;
- Driver personal details and days and times that they operated the taxi-cab;
- Contents of each bailment agreement with each bailee driver;
- Details in relation to faults or damage to taxi-cab;
- Nature and date of all maintenance work;

Network service providers are required to record information on:

- Date, time and method of each booking, including pick-up details, whether booking was offered to and accepted by a driver;
- Occasions the emergency devices were activated and the circumstance surrounding each activation; and
- Detailed information regarding customer complaints and actions taken in response.

The volume and extent of information that is required to be collected by taxi operators and network service providers under these regulations is comprehensive and would provide sufficient information to report against a suite of performance indicators and would appear to provide sufficient information to report against a suite of performance indicators.

The accreditation framework establishes record keeping requirements, and the requirement that taxi operators and network service providers submit information to the VTD as requested. Small taxi operators are not required to submit information more frequently than every three years. The information collection process under the accreditation regime has yet to be established. There will be value in carefully considering the scope and detail of the information to be collection, and its ability to meet performance monitoring and other information requirements without being excessively onerous and costly to the industry.

The Commission intends to develop a relatively specific set of recommendations in relation to information to be collected from network service providers in the final report to this Review, and based on performance measures such as described in section 8.3 above.

Information to be collected from taxi operators, which primarily relates to the statistical information on taxi operations, could be obtained by randomly selecting samples of operators to provide information each six months. The mandatory information gathering powers under the accreditation regime would compel the provision of the operational information. (Noting that normally small taxi operators can only be required to provide information once every three years).

The information to be collected from industry participants can be used to produce performance indicators and statistical information for the proposed taxi industry performance monitoring report. This will provide information on whether taxi services are meeting performance standards. In combination with the current taxi customer survey enough data should be available to provide the industry with adequate measures of performance.

8.2.3 VISTA

The Victorian Integrated Survey of Travel and Activity (**VISTA**) is being conducted by DOT in conjunction with the Urban Transport Institute and I-View Pty Ltd. It represents a detailed survey of travel patterns of householders in Melbourne and selected regional centres. The survey itself is being conducted between April 2007 and June 2008, and results will be available later in 2008.

VISTA will provide very detailed data on all household travel patterns. Comparison of the results of this survey with the earlier comparable VATS study should also provide information about changes in a variety of aspects of travel patterns over time.

The VISTA study is expected to provide DOT with much of the information required to support its transport planning and policy development activities. Statistical information to be published on the taxi industry performance monitoring report – or from the customer satisfaction monitoring survey – will provide useful supplementary data.

8.2.4 Periodic Costs/Operations Survey

For the purpose of this Review, PwC was commissioned to undertake a survey of taxi operators and drivers to obtain information and data on key determinants of costs and operational aspects of the taxi industry. Data collected included:

- Revenue earned
- Kilometres travelled
- Number of hirings
- Operation and maintenance costs
- Driver details including bailment agreements, income and costs
- shifts and types of cabs operated.

A similar survey was carried out in 2008 for the Minister of Transport in NSW, and a survey was also undertaken by PwC for the 2005 Taxi Fare Review.

The Commission's preliminary view is that these surveys of costs are sufficient for obtaining unbiased and reasonably accurate cost estimates so long as adequate survey response rates can be achieved. The Commission does not expect to require information on costs to be provided by every taxi operator in the industry, as might be contemplated by the record keeping requirements under the accreditation regime. Surveys are a cost-effective means of collecting data. It would be unduly costly to require every taxi operator to submit information on costs. Further, it would not be in keeping with the form of price regulation adopted by the Commission. Therefore, the Commission intends to retain the survey based approach. The survey would be carried out every three to five years, at the commencement of each pricing period.

Such surveys might be made more cost effective by selecting a smaller random sample of operators, and using mandatory information gathering powers to compel the provision of information from the randomly selected operators. However, given the limited frequency with which information can be obtained from taxi operators by this means, it is possible that this method would not be available.

The Commission can use powers to compel the provision of information under s.189 of the *Transport Act 1983* when it undertakes taxi fare investigations. The Commission will also consider whether it should formalise its information gathering at the commencement of each taxi fare review through the establishment of standardised information templates. This may assist in ensuring there is confidence in the information provided.

8.3 Measuring performance – better practice KPIs

In order to determine whether the taxi services operating in Victoria are meeting expectations and performing at an acceptable level it is necessary to have identified measures of performance with established targets. It is also necessary to have the appropriate data to allow reporting against these indicators and determine whether targets are being met. The Commission sees these being reported in an industry performance monitoring report, preferably every six months. A report of

this kind would publish Key Performance Indicators (**KPIs**), as well as statistical information on taxi use.

KPIs should be developed that focus on a range of service quality measures from customer satisfaction to overall industry efficiency and profitability. These measures should be indicators of the adequacy of the supply of taxi services in meeting demand, sustainability within the industry and overall trends in performance over time.

Information gathering should not be excessive, nor impose unnecessary costs on the industry. Therefore, KPIs should be developed that provide sufficient information on performance while minimising the information collection task.

8.3.1 Preliminary views on performance measures to be reported

The proposed performance monitoring report would provide information on:

- KPIs for pre-booked services from network services booking systems
- Customer satisfaction measures from customer surveys
- Complaints information from VTD and taxi network complaint handling systems
- Driver safety and remuneration from networks and operators
- Statistical information on taxi use from operators and surveys or householders.

Performance measures relating to pre-booked services typically include:

- Average waiting time 'on-hold' when making a phone booking;
- Average waiting time for a taxi from phone bookings (for both immediate pick-up and pre-booked time);
- Average waiting time for WATs;
- Number of jobs not covered.

Given the findings of previous Victorian customer satisfaction surveys in relation to long waiting times during peak Friday and Saturday night periods, there will be merit in reporting performance measures separately for peak periods and off-peak periods. There may also be benefit in conducting periodic field surveys of waiting times at taxi ranks.

Performance measures relating to customer satisfaction include:

- Overall satisfaction with taxi services
- Satisfaction with taxi service availability, including at taxi ranks, for hailing in the street, and waiting times for pre-booked services
- Availability of WAT services
- Safety
- Fare levels
- Comfort, including cleanliness and maintenance of taxi; and
- Service delivery, including friendliness of driver, driver communication skills, and driver knowledge.

There may be value in reporting customer satisfaction by geographical area (e.g. inner city and outer metropolitan suburbs¹⁹²), demographic characteristics, MPTP members and wheelchair users. This will allow determination of whether there are any differences in performance according to these trip or user characteristics.

Performance measures relating to complaint handling could include:

- the average number of complaints per 100 taxi trips
- the most common types of complaints received
- the numbers of complaints made to different bodies (e.g. the VTD, taxi networks) and in each case, how many were resolved, and the average time taken to successfully resolve.

Relevant performance measures relating to driver safety and remuneration might include:

- Safety alarm activations
- Proportion of drivers on revenue sharing and fixed pay-in arrangements, and industry average revenue sharing and fixed pay-in amounts.

The information made available in relation to driver remuneration arrangements would support the transparency objectives discussed in chapter 7.

Statistical information on taxi use includes information such as:

- Average number of jobs per taxi per week
- Average paid kilometres per taxi per week
- Average total kilometres per vehicle per week
- Average on-road hours per vehicle per week, and average number of shifts operated per taxi per week
- Proportion of jobs pre-booked.

The statistical information will be useful for assessing overall trends in demand and supply and complement the other indicators in providing information on the overall performance of the industry.

8.3.2 KPIs and performance targets used in other jurisdictions

While it is useful to have KPIs to measure performance, it is important that there are performance targets against which they can be measured. Although trends in KPIs can be informative, service standards or targets against which KPI outcomes are compared, are useful to clearly show whether performance is at expected levels. When reporting taxi industry KPIs, other Australian jurisdictions have introduced performance benchmarks that the taxi industries are expected to meet.

¹⁹² The reference here is not to the Outer Suburban Zone of Dandenong and Frankston, but to all outer suburban suburbs of Melbourne

New South Wales

NSW has put in place KPIs for its taxi industry, Box 8.1 summarises these and the associated standards in relation to a number of these. The majority of these KPIs relate to the performance of the phone booking service and the associated waiting times. There are also measures that relate specifically to WAT services.

Data is collected by the NSW Ministry of Transport (**MOT**) through its Customer Feedback Management System (**CFMS**), which is a centralised database that manages feedback from taxi customers across the NSW taxi network. The CFMS records all feedback from customers - whether it comes via the taxi company, the NSW Transport Infoline or the Ministry's Transport Operations Division. Prior to the introduction of the CFMS all taxi networks and the NSW MOT had their own customer feedback systems.

Box 8.1 NSW taxi performance indicators

In addition to reporting performance against these targets, IPART reports against a range of other Key Performance Indicators, including:

- Number of phone calls received, number of bookings required, number of advance bookings,
- Number of bookings offloaded, or offloaded and returned
- Number of jobs accepted by taxi drivers and the number of rejections, the number of 'no cab availables' and the number of 'no shows'
- Average answering time (seconds), average acceptance time (minutes) and average pick up time (minutes)
- Average number of radio jobs completed per taxi (per year) and total pick ups
- Number of taxis operating on network (monthly average), and average number of taxis signed on at 9 am (monthly average)

IPART also presents information on some of these service standards separately for WATs.

Source: IPART (July 2007), 'Maximum fares for taxis in NSW for 2007/08: Recommendations to the Minister', Appendix B.

Western Australia

A similar approach has been adopted by the Western Australian Government. Performance standards for the taxi industry were introduced in Western Australian in July 2000. Independent assessment of performance against these standards is undertaken and publicly reported on a quarterly basis. This assessment is reliant on data from the Taxi Dispatch Service and as a result only measures performance in relation to taxi bookings made using this system. Specific standards used in Western Australia to monitor performance of the taxi industry are detailed in Box 8.2.

Box 8.2 WA taxi performance standards

Performance standards are reported for conventional services and wheelchair services, they focus on the following areas:

- Driver viability and taxi demand – costs are monitored using a modified Private Motoring Index and used as an indicator of continued viability, demand is measured in terms of jobs per hour per month. Amount of work completed by different types of taxis (i.e., peak taxi) is used to monitor viability of different plate types;
- Phone performance – green standard performance requires the more than 75 per cent of calls are answered in 15 seconds or less and less than 7 per cent of customers fail to get through;
- Jobs not covered – high standard performance target is 1 per cent or less of jobs not covered in peak periods and 0.3 per cent or less in off-peak periods for inner and middle suburbs. For outer suburbs these targets increase to 2 per cent and 0.5 per cent respectively;
- Taxi waiting times – performance standard for ASAP bookings in peak times is more than 90 per cent of jobs picked-up within 20 minutes, during off-peak times it is 15 minutes. For pre-booked jobs more than 85 per cent should be picked-up within 5 minutes during peak periods and more than 90 per cent within 5 minutes in off-peak times;
- Complaint handling – relies on a monthly survey of individuals who have made a complaint. Performance standard requires 95 per cent of complaints to be responded to within 3 days and for substantial progress within 14 – 21 days for 95 per cent of complaints. The number of complaints within different categories is also reported; and
- Driver safety – is measured by the number of driver security activations, the performance standard is set at zero.

Source: Department for Planning and Infrastructure (June 2007), 'Taxi Industry Service Standards Quarterly Reports – April to June Quarter'

The ACT

In the ACT the Department of Territory and Municipal Services determines performance measures and service standards for the taxi network. These include maximum waiting times applicable to all taxis (including WATs), vehicle standards and other operating conditions. A summary of these standards is contained in Box 8.3.

Box 8.3 **ACT taxi performance standards**

Performance standards in relation to waiting times are reported for standard services and wheelchair services, standards and their target levels are:

- Per cent of responses within 18 minutes, at peak times, target is 85%;
- Per cent of responses within 30 minutes, at peak times, target is 95%;
- Per cent of responses within 10 minutes, in off-peak times, target is 85%; and
- Per cent of responses within 20 minutes, in off-peak times, target is 95%.

Source: ICRC (February 2004) 'Taxi Fares 'Draft Determination: Taxi Fares 1 July 2004 to 30 June 2007', pp.25-27

8.3.3 Multi Purpose Taxi Program (MPTP) and WAT specific KPIs

A further issue is whether a separate or additional set of KPIs should be established for the MPTP that could assist in determining if there are any differences in the services provided to members versus non-members.

The Commission is of the preliminary view that rather than developing KPIs that are specific to the MPTP and to WAT services, the same set of performance standards are reported for conventional taxi services, MPTP services, and among these, specifically for wheelchair services. This will be in keeping with the Disability Standards, under which, WAT service targets are the performance outcomes of taxi service standards for able bodied persons. Thus, the performance of taxi services in providing services to the disabled should be measured by the same performance measures that apply to conventional taxi services. This will allow a direct comparison between the different types of services to ensure that the MPTP services and WAT services are achieving the same performance outcomes as standard services.

In regard to the customer satisfaction monitoring survey, additional targeted sampling of MPTP members and wheelchair users is likely to be required to achieve adequate samples and enable statistically significant comparisons to be made between reported levels of satisfaction of disabled and able-bodied users.

The reporting of consistent performance measures for conventional services and WAT services, and in some instances (e.g. customer satisfaction) for MPTP users more widely, will be consistent with the HREOC recommendation that all jurisdictions that had not already done so, implement as a matter of urgency monitoring of wheelchair accessible taxi services against appropriate performance standards, and to publish regularly (at least annually) the results of monitoring, and to consult with industry and community representatives on means of addressing any deficiencies in performance where these continue to be identified by monitoring.¹⁹³

¹⁹³ HREOC 2007, op.cit.

8.4 Other uses for information collected

In addition to performance monitoring there are other important uses of the information that is collected on the Victorian taxi industry.

8.4.1 Linking response time to licence release volumes

Under existing arrangements the Victorian Government controls the release of taxi licences based on its assessment of consumer need. Licences for operation in regional areas are generally issued when increased demand is experienced or where applicants wish to establish a service at a location where a taxi service does not currently exist.

Currently demand is measured in terms of general population growth, that is, an attempt is made to ensure that the proportion of taxis to population remains at a reasonable or appropriate level. An alternative to this approach would be to use waiting time as a measure for demand. Increasing waiting times could be viewed as an indicator of an increase in demand for taxi services. There are problems with both the ratio of taxis to population and waiting time approaches. For example, increased traffic congestion during peak travel times would increase waiting times. It may be that there are a sufficient number of taxis to complete the bookings but they are simply unable to reach the pick-up point in the same time as in the past due to increased congestion. And, while it may seem reasonable that an increase in population would lead to an increase in demand for taxi services the exact relationship between the two would need to be understood in order for this method to be effective. Not all forms of population growth will necessarily result in increase demand for taxis.

Therefore, both methods could be used, thus providing more than one indicator upon which a decision to increase the number of licences is based. The ACT has adopted an approach of issuing licences based on cabs per head of population indices and waiting times.

8.4.2 Transport planning

In its planning role the DOT is likely to be interested in detailed data and performance measures that allow analysis to support transport planning and policy evaluation. In planning for future needs the DOT will be interested in measures that provide an indication of future demand and supply patterns. Therefore it is likely to be interested in waiting times, the number of jobs not covered and also the number of drivers and operators and utilisation patterns for vehicles.

It is likely that the DOT would be interested in this information at quite a disaggregated level, that is, it would be interested in data and performance on specific routes or in specific geographic areas as this level of detail would allow for better planning outcomes.

8.5 Conclusions

Performance monitoring and targets

The taxi industry is a service industry and therefore KPIs need to be developed to enable regulators to monitor service levels and customers satisfaction. Information that is collected should be used to produce an annual taxi industry-specific monitoring report. This report should at least contain customer satisfaction results from the current customer survey, performance against benchmark KPIs, and complaint handling outcomes.

Although a wide range of KPIs should be reported, to avoid having a plethora of targets, only selected KPIs commonly have associated performance targets. Keeping the overall objectives in mind, and the examples from other jurisdictions, the following KPIs and associated performance targets are recommended for the Victorian taxi industry. In each case, the indicators should be separately reported for wheelchair users and for all other users:

1. Per cent of calls that are answered by booking service within 30 seconds, 1 minute and 2 minutes, and the average time taken to answer a call in seconds.

If energy call centre performance is a useful guide, then appropriate performance targets for telephone answering times may be: 75% of calls answered in 30 seconds, and an average call answering time of 40 seconds¹⁹⁴.

2. For bookings for immediate pick-up, the per cent of taxis to arrive within 10, 15 and 30 minutes separately reported for peak periods (as defined in the accreditation regulations, namely from 7.30am to 9.00am and 3.00m to 4.30pm, Monday to Friday, and from midnight Friday to 6.00am Saturday and from midnight Saturday to 6.00am Sunday), and for non-peak periods.

Taking other jurisdictions as a guide, then appropriate targets for taxi bookings that are for immediate pick-up may be as shown in Table 8.1.

Table 8.1 Indicative waiting time targets

	<i>% within time since booking made (for immediate pick-up)</i>	
	<i>Peak</i>	<i>Off-peak</i>
10 min	70	85
15 min	80	90
30 min	95	100

Source: ESC

3. For bookings to arrive at a set time the percent of taxis that arrive within 5 minutes of the nominated time, reported for peak periods and for non-peak periods.

¹⁹⁴ Essential Services Commission '2006-07 Energy Retail Performance – Consumer Snapshot'

For pre-booked jobs at a scheduled time, appropriate targets (following WA) may be: 85% within 5 minutes of the nominated time during peak times, and 90% within 5 minutes during off-peak times.

For some other measures there is insufficient information available for the Commission to form a preliminary view as to an appropriate target. Therefore the Commission seeks comment on the appropriate performance targets for the following indicators:

4. Per cent of jobs not covered.
5. Number of complaints per 100 taxi trips.
6. Time taken for complaints to be responded to and resolved.
7. Number of driver security activations. Note that Western Australia uses a target of zero for this measure.
8. Per cent of customers that are satisfied with taxi services. Note that the better performing modes of transport in Victoria are achieving 75-80% customer satisfaction.

Consideration should be given to reporting KPIs for metropolitan and country services separately and whether all of the performance standards that are to be applied to metropolitan services are appropriate for country services.

It is important that Victorians are using WATs and/or members of the MPTP receive the same level of service as all other taxi users. In order to determine whether services levels are the same, industry KPIs should be reported separately for standard services and for MPTP and WAT services. This will allow a comparison to be made and eliminate the need to develop a separate set of KPIs.

The complaints process should be accessible to those with a disability. There should be the ability for complaints to be made in writing, by phone, by email or even by SMS. The process for making a complaint should be clear and information made available as to what the process is.

If performance monitoring reveals that there are significant differences in the level of service being provided to WAT users and other taxi customers, further WAT licences should be released until this difference is removed.

Information collection

Until relatively recently the availability of data and information in relation to the taxi industry has been difficult to obtain. There have been a number of surveys undertaken, but only the Customer Satisfaction Monitoring Survey has been undertaken on a regular basis.

The combination of information collected through the taxi customer survey and the record keeping requirements under regulations should provide sufficient data to enable adequate performance monitoring of the taxi industry. However, further action will be required to ensure that this occurs.

As discussed earlier, different regulatory bodies require different information to perform their task. Each of these bodies collects information from the industry to perform these tasks. Currently the DOT/VTD conducts the customer satisfaction

survey and will be responsible for the collection of information collected under the accreditation scheme. Not all the information required by the ESC in its fare determination role is provided through the customer satisfaction monitoring survey and the new accreditation regulations. Therefore, there is value in continuing the surveys that have been undertaken by PwC and the ESC for this and previous fare reviews. These surveys could be refined to form a single template for future fare setting processes.

To ensure that all bodies have the required information to perform their respective regulatory tasks, information collected by each body should be routinely shared. One way to facilitate this would be for the ESC to indicate to DOT/VTD the information that it requires (that is currently collected) to undertake the fare determination exercise, and for this information be made available to the ESC on an annual (or other agreed timeframe) basis.

Preliminary conclusions:

A taxi industry performance monitoring report should be developed, and published every six months. This would include a broad range of indicators relating to booking service waiting times, wheelchair service waiting times, customer satisfaction, complaints statistics, and other information identified above.

KPIs should be developed that focus on a range of service quality measures from customer satisfaction to overall industry efficiency and profitability. These measures should be indicators of the adequacy of the supply of taxi services in meeting demand, sustainability within the industry and overall trends in performance over time.

The complaints process should be accessible to those with a disability. There should be the ability for complaints to be made in writing, by phone, by email or even by SMS. The process for making a complaint should be clear and information made available as to what the process is.

If performance monitoring reveals that there are significant differences in the level of service being provided to WAT users and other taxi customers, further WAT licences should be released until this difference is removed.

There is value in continuing the surveys for future fare setting processes.

9 AFFORDABILITY & AVAILABILITY OF SERVICES TO DISADVANTAGED USERS

The terms of reference direct the Commission to have regard to the affordability and availability of services to users. Of particular importance in submissions received by the Commission were issues of affordability and availability to people for whom taxis are an essential mode of transport, such as people with disabilities or who are remote from public transport and are not able to drive a car.

These issues need to be considered against the following objectives:

- the need for services to disabled people to be of equivalent standard to those available to the able-bodied, and
- the Government's objectives in relation to community transport services (including taxis) for facilitating 'older people staying involved in social and community activities and younger and financially disadvantaged people having access to education, training and employment'¹⁹⁵.

These objectives were highlighted in submissions made by VCOSS and DHS. VCOSS stated:

*Taxis play a critical role in providing transport for many people with disabilities, older people, and those unable to drive and are not able to access public transport. In the absence of accessible (or indeed any) public transport in many areas, especially in rural Victoria, taxis are the primary means of independent travel for many Victorians. Taxis also provide an essential transport safety net for low income and disadvantaged Victorians who don't have access to a car.*¹⁹⁶

And DHS said:

The primary area of concern shared by the Department of Human Services' Concession, Health, Aged and Disability areas is ensuring access and affordability for low income and vulnerable taxi users. The Department' submission is based on the premise that effective and equitable access to transport is essential for participation in social and economic life, and provides the basis for a fair and safe society.

¹⁹⁵ A Fairer Victoria – Progress & Next Steps (June 2006), p.10

¹⁹⁶ VCOSS submission p.1

Achievement of these objectives is in part dependent on the availability and affordability of taxi services. Availability is affected by entry regulation, and affordability is influenced by fare regulation. Taxis are a relatively expensive form of transport, and VCOSS observed that 'taxi fares are already at a level which is unaffordable by many people on a low income'.

One of the most important challenges to the transport system is the aging of the population, and the expected increased special needs of elderly and/or disabled people. Because taxis provide a door to door service they have a key role to play in the transportation of these groups.

9.1 Subsidies to disadvantaged users

The Multi-Purpose Taxi Program (**MPTP**) is the government's subsidy program for 'people who have a severe and permanent disability and who, because of that disability, are unable to independently access bus or tram services'¹⁹⁷. There are approximately 178,000 MPTP members, 80% of whom are over 60 years of age, and 70% are over 70 years of age¹⁹⁸. The scheme covers approximately 3.6% of Victoria's population.

Members of the MPTP must live in Victoria, have a severe and permanent disability, and have a disability that means they cannot use public transport independently. They also must either use a wheelchair all the time, hold a Department of Veterans' Affairs Pensioner Concession Card or gold Repatriation Health Card, hold certain Pensioner Concession or Health Care Cards from Centrelink, or be able to show they have financial hardship. A doctor must also complete a section included in the persons MPTP application form.

The concession cards required are the same as those required for public transport concession fares, though there are additional public transport concessions not accepted in the MPTP such as student concessions¹⁹⁹. As mentioned, MPTP eligibility is limited to those who may not be able take advantage of public transport concessions, namely the permanently disabled who cannot independently access public transport services. People living in an area without public transport, and not able to otherwise meet their transport requirements, are not eligible.

The MPTP scheme provides a subsidy to MPTP members equal to 50% of the taxi fare. These subsidies are subject to a maximum subsidy of \$30 per trip, and a maximum overall subsidy per member of \$1045 per year. The annual subsidy limit does have some exemptions. People permanently requiring the use of wheelchair or holding a Department of Veterans' Affairs extreme disability or totally incapacitated endorsement have no upper limit on annual subsidies. Furthermore, individuals may have the limit set higher if they are able to demonstrate greater need because of employment, medical or education purposes.

¹⁹⁷ VTD

¹⁹⁸ VTD unpublished information provided to the Commission

¹⁹⁹ DOI website 2007

The MPTP subsidy limit is designed to automatically increase in line with taxi fare increases, as previously recommended by the Commission.²⁰⁰

The MPTP card can be used for any type of taxi journey except when the journey is covered by insurance or is also already being subsidised by another Government department. Family and friends of the card holder are able to accompany card holders without incurring additional expense.

9.1.1 Use of the MPTP scheme

During 2006-07 the MPTP provided approximately 4.0 million trips to passengers (excluding wheelchair passengers). As shown in Table 9.1 below, this is similar to the number of MPTP trips in 2004-05 and 2005-06²⁰¹. However over the five year period there was a significant decrease in MPTP trips after 2002-03, by over 20%. This followed a tightening of the MPTP eligibility criteria at the beginning of the 2004-05 financial year. This tightening saw the introduction of means testing and implementation of an annual subsidy limit. This policy shift appears to have been the driver behind the reduction of trips, with the taxi industry noting the adverse impact it was having on taxi operations, especially in rural areas.²⁰²

Table 9.1 MPTP use and cost

	2002-03	2003-04	2004-05	2005-06	2006-07
Trips with passenger only ('000)	5,136	4,949	4,134	4,107	3,991
Trips with wheelchair ('000)	500	494	509	534	564
Annual cost (\$m)	42.4	40.5	34.0	36.1	37.5

Source: VTD

Taxi trips with wheelchairs rose to 564,000 during 2006-07²⁰³, an increase of 5.6% over the 2005-06 level. DOI has interpreted this increase as due to Government initiatives and general ongoing user confidence in the provision of WATs.

The cost of providing the MPTP scheme during 2006-07 was \$37.5m, an increase of 4.0% on the 2005-06 financial year. However, as Table 8.1 indicates, the costs of the MPTP program have decreased by 11.5% since 2002-03, again primarily due to the eligibility constraints.

Based upon DOI reporting, and industry survey results, during 2007 MPTP trips accounted for roughly 14.2% of total trips in the industry²⁰⁴. The MPTP program

²⁰⁰ DOI (2007), Annual Report 2006-07, pg 41

²⁰¹ DOI (2007), Annual Report 2006-07, pg 187

²⁰² See for example, VTA, Taxi Talk, December 2004 or Submission from Cobram Barooga Taxists to Taxi Fare Review Issue Paper, 2005.

²⁰³ DOI (2006), Annual Report 2005-06, pg 268

represents a higher proportion of taxi trips in regional areas, where 24% of taxi fare revenue is from MPTP members²⁰⁵.

9.1.2 Views of stakeholders

Submissions to this review and representations in public forums have indicated a range of concerns with the MPTP.

One issue is eligibility. Some submitters have indicated that the MPTP has a relatively narrow application, being limited to those with permanent or severe disability. There is a range of other relatively disadvantaged people who are not subsidised. Another issue is the adequacy of the subsidies. It is argued that the caps that apply to the subsidies are too limiting, and that the assistance provided to wheelchair accessible taxi (WAT) operators and drivers is insufficient (issues specifically relevant to WATs are discussed in 9.2 below).

The Commission attended a meeting of the Ministerial Advisory Council of Senior Victorians, and received a number of related views about the MPTP scheme:

- The subsidy caps are considered to be inadequate. For disabled people who undertake voluntary work, the trips undertaken as part of that voluntary work are included under the cap.
- The MPTP membership criteria are considered to be too narrow, and too dependent on a Doctor's medical certificate. Doctors may be subjective or inconsistent in their approach.
- The complexity of the application process is a deterrent to membership.

More generally there are concerns about waiting times, taxi driver preparedness to undertake short distance trips, and the need for improved driver training on providing services to the disabled.

VCOSS noted:

The MPTP currently has a number of limitations which restrict its ability to ameliorate the impact of fare increases on low income and disadvantaged groups:

- *the program is restricted to people with a permanent and severe disability;*
- *the subsidy cap which is applied to people with some types of disabilities and not others places a financial and psychological constraint on using taxi services;*

²⁰⁴ Includes total passenger and wheelchair trips and uses the 2006-07 financial year trips as a proxy for the 2007 calendar year to allow for comparison. Source: DOI (2007), Annual Report, 2006-07, PwC Industry Survey

²⁰⁵ Booz Allen (2006) 'Victorian Country Taxi Industry Review Working Group 2006', p.8

- *the program only covers 50 per cent of the fare up to \$30 – which discriminates against people who need to make longer trips such as people in rural areas; and*
- *the complexity of the application process acts as a barrier to people accessing the program.*²⁰⁶

DHS also identified some concerns:

*That the current industry structure does not lead to consistent outcomes regarding reliability and quality of service for MPTP customers, suggests a need for greater attention to be paid to the specific issues relating to this customer base. Closer attention to the MPTP customer segment could examine affordability, especially in country areas, along with practical issues such as the recommendation of the recent HREOC report and the Country Taxi Review (May 2006) Working Group that limiting the MPTP subsidies for longer distance trips tends to disadvantage the small operators who operate in the remote areas of the state.*²⁰⁷

Anecdotal evidence supplied via industry submissions and at public forums suggests that there are current discrepancies between the use and effectiveness of the MPTP and WATs in different geographic locations. These differences can be broken down into two major relevant themes:

- The marginal commercial viability of operating WATs makes it more efficient to operate WATs in larger regional and metro centres than smaller country towns. Operators in smaller country towns have indicated that their WAT fleets are underutilised for their designed purpose, only serving passengers requiring wheelchair access during peak periods²⁰⁸. In contrast, operators in larger regional and metro areas were able to sustain close to 100% of WAT usage for wheelchair passengers. The higher vehicle purchase, operation and maintenance costs of WATs therefore make the provision of these services less efficient where there is insufficient demand for their services. This translates to very limited, or no, coverage in smaller country towns²⁰⁹.
- Owners and drivers in country towns are relatively more reliant on payments via the MPTP card. Following the tightening of eligibility criteria and introduction of a subsidy limit in mid 2004, regional taxi operators reported declines of between 20-30% of patronage²¹⁰. One regional operator estimated that 90% of daytime users had been reliant upon the MPTP subsidy for their trips, while the Victorian

²⁰⁶ VCOSS submission, p.1

²⁰⁷ DHS submission, p.2

²⁰⁸ Booz Allen Hamilton, Country Taxi Review, Prepared for the Victorian Taxi and Tow Truck Directorate, August 2006.

²⁰⁹ DOI, Victorian Country Taxi Industry Review: Response to Working Party Recommendations, May 2006.

²¹⁰ Essential Services Commission, Taxi Fare Review, 2005, pg 101

Taxi Industry Working Group found that in regional areas, an average of 24% of total taxi fare revenue is generated from MPTP users²¹¹.

Another issue raised by submitters is whether there should be more widespread use of user-subsidies. For example, Mr John Glazebrook suggested:

The State must make funding available for subsidised taxi travel for low income earners and pensioners and beneficiaries who qualify for Health Care Cards.

This is consistent with the finding of the Country Taxi Review that the Government develop an assistance scheme for taxi users (similar to the Multi Purpose Tax Program) in locations without local public transport services, and available to persons who would otherwise have access to transport concessions if public transport were available. The DOI response to this proposal was that:

such financial support is a question of social rather than transport policy and therefore must be addressed jointly with agencies such as the Departments of Human Services and Victorian Communities.

However, DHS has advised the Commission that it is not involved in administering any transport subsidy schemes.

A recent report by the Victorian Competition and Efficiency Commission (VCEC) has also highlighted the community concerns regarding the availability of taxis for those with disabilities.²¹²

9.1.3 Discussion of specific issues raised

Eligibility for the MPTP

Comparisons of the Victorian MPTP scheme with similar schemes in other Australian jurisdictions, and overseas, suggests that the scheme has comparable coverage to the better of the benchmarks available. The Commission welcomes comment on whether the mechanics of the application process can be improved, noting that it is an objective of the Victorian Government to minimise red tape.

In regard to the views that the scheme should be extended beyond the permanently disabled, there are two separate points to comment on:

Firstly, it is argued by taxi operators and drivers that WATs should receive the wheelchair lifting fee for all wheelchair users, not just those who are MPTP members. As this argument appears to have merit, there may be benefit in providing for temporary MPTP membership to wheelchair users who are not permanently disabled.

Second, there is the question about the wider application of subsidies to non-disabled elderly people, or other disadvantaged users, in areas where other forms

²¹¹ Victorian Country Taxi Industry Review Working Group 2006, p.8

²¹² VCEC (May 2008) 'A State of Liveability: An Inquiry into Enhancing Victoria's Liveability', p.230

of public transport are not available. While the MPTP caters for those with a severe and permanent disability, there are currently no taxi concessions for seniors who lack the capacity to drive and don't have access to public transport.

Many seniors rely heavily upon taxi transport for medical and basic needs, such as shopping and banking. "However, the cost of taxis is often seen as a barrier and is prohibitive for those on low incomes. Even for middle and higher income earners the perceived cost can be an issue".²¹³ Not only can this lead to declining levels of health, but reduced social and recreational contact can increase the prevalence of depression and social isolation.²¹⁴

The case for discounted taxi transport for seniors is strongest in regional and rural areas. These areas often lack public transport infrastructure, effectively leaving taxis as the only public transport providers. However, even in metropolitan areas, public transport options may not be practical, due to accessibility or timetabling, resulting in reliance on taxis.

While there is merit in a social service argument for taxi discounts for seniors in certain localities, important commercial and policy factors also need to be considered. For example, it would be necessary to more clearly identify the needs for such a scheme, and the groups to which it would be relevant, the potential cost of implementing it, and the ongoing budgetary implications, as well as the impact on the supply and demand for taxi services – all of which would need to be examined in detail.

All these matters would need to be carefully weighed. For this reason, the Commission considers that this is a subject that could usefully be examined as part of a separate review. For example, such a review could be undertaken by a body such as VCEC or the Commission.

Some observations are made about the potential roles of taxis in community transport in section 9.3.

The MPTP subsidy

The subsidy of 50% of the taxi fare is broadly comparable to other Australian jurisdictions. Although higher rates of subsidy are available in some European countries, the interstate comparisons are perhaps a better guide on this question.

The subsidy caps

The Country Taxi Review identified a number of issues associated with the MPTP. It examined whether the \$30 trip subsidy cap was too tight. The information presented by the Working Group tended to suggest that the great majority of MPTP trips were below \$60, and hence relatively few users were constrained by the cap. It nevertheless recommended increasing the cap to \$50. However, this recommendation was not supported by DOI, who considered that the \$30 cap was based on thorough analysis.

²¹³ DOI, *Maintaining Mobility: The Transition from the Driver to Non-Driver*, 2007, pg 21

²¹⁴ Victorian Council of Social Services, *Submission to Essential Services Commission, Taxi Fare Review*, 2005

In the current Review, VCOSS and DHS have expressed concerns to the Commission about the \$30 trip subsidy cap. DHS has indicated that it leads to inconsistency in the availability and affordability of services for some MPTP members in country areas, and that it impacts on the financial viability of taxi operators in remote areas of Victoria. There is also a view that the observed data, which shows a high proportion of trips fall within the cap, does not provide a true picture due to the discouraging effect of the cap on longer trips. Similar views were expressed by the Ministerial Advisory Council of Senior Victorians.

The MPTP trip subsidy cap is not simply a matter of transport policy – it is also a matter of social policy – and therefore the views of DHS on this question should be given significant weight. For this reason, in the Commission’s view, the Government should reconsider its position in relation to the MPTP trip subsidy cap.

The Country Taxi Review Working Group did not address the annual MPTP subsidy cap. However, in the Commission’s assessment this cap appears to impose the greater constraint than the trip subsidy cap. Consistent with the purpose of the MPTP scheme to enable disabled people to effectively participate in work and social activity, a significant amount of transport per person ought to be provided for under the scheme. For example, in Finland:

... all severely disabled people are entitled to means of transport to and from school or workplace every day plus 18 one-way recreational trips per month (plus all trips to and from hospitals, etc). Taxis are the main means of transport for these trips.²¹⁵

The current MPTP annual cap appears to restrict the disabled person to approximately one return taxi trip outing per week. A user who has outings 3 to 5 times per week (return trips) could easily accumulate an annual taxi cost of up to \$8,000²¹⁶, which would require an overall subsidy of \$4,000. Although some users can apply to have their annual subsidy cap relaxed, this appears to involve an undesirable amount of red tape. These observations tend to suggest that the current MPTP annual subsidy cap appears to be significantly below what one would expect, and should be increased by several orders of magnitude if the objectives of the scheme are to be realised. The Commission’s preliminary conclusion is for increased funding to enable the annual subsidy cap to be increased by several orders of magnitude, subject to overall budget constraints. With regard to this funding, it is noted that the overall costs of the MPTP scheme have decreased in recent years.

Conclusions

In an environment where a growing proportion of taxi trips will be servicing elderly and disadvantaged users due to the aging of the population, and where the Government is committed to ensuring that these users will have access to affordable transport services enabling them to participate in social activity and not be isolated, there is potential for an increasing reliance on taxi services to meet

²¹⁵ OECD (2001) *Aspects Economiques De L’Accessibilite Des Taxis*, p. 26

²¹⁶ Based on an average of 4 return trips per week at the average taxi fare of \$19 per trip

these needs. There is also an implied greater scope for Government subsidies towards assisting the elderly and disadvantaged in meeting their travel costs.

However, structural elements of the taxi industry, and in particular the private capture of economic rents associated with licence scarcity, presents a problem for the taxi industry in its ability to satisfactorily provide Government funded or subsidised services. It is difficult to reconcile the provision of Government subsidies to service providers with the presence of monopolistic power and the likelihood that part of this assistance may flow to private investors as windfall gains. This issue was discussed in Section 7 above.

Preliminary conclusions

Examine options to reduce red tape in the application process for MPTP membership

Provide for temporary membership for people who are temporarily disabled and required to use a wheelchair.

Retain the MPTP benefit level at 50% of the fare.

Reconsider the Government position on previous proposals to increase the maximum trip subsidy to \$50

A several-fold increase in the annual MPTP subsidy cap should be considered.

9.2 Wheelchair accessibility

There are approximately 16,000 MPTP members who use wheelchairs²¹⁷. They represent around 10% of MPTP membership, and a similar proportion of MPTP trips.

To address the transport needs of people in wheelchairs, WATs have progressively been introduced into the taxi fleet since 1983. At present approximately 8% of all taxis in Victoria are WATs, including 6% of taxis in Melbourne; 13% of taxis in regional urban areas; and 17% in country areas (see Table 2.1).

9.2.1 Subsidies

Subsidies for special services can be user-side subsidies (such as the MPTP program) or supply-side subsidies, where payment is made to the service provider. There are a number of supply-side subsidies for the provision of wheelchair accessible services.

The supply-side subsidies provided to facilitate the supply of WATs differ between the country and metropolitan areas. In country areas the supply-side subsidies include:

²¹⁷ VTD

- A 'lifting fee' subsidy of \$10 is paid by the government to WAT operators each time they are engaged by a wheelchair user who has MPTP membership. A minimum of \$6.70 of this fee must be paid to the driver. VTD states that:

The surcharge is designed to compensate the driver for loading and unloading time thus ensuring the cost to the passenger is consistent with the metered fare for an able bodied person²¹⁸

- Financial assistance is also available in certain circumstances to taxi operators for the purchase or fitting out of WATs (up to \$40,000). This scheme is particularly focussed on country operators switching a conventional taxi licence to a WAT, and financial need testing is not required in towns with less than 10 cabs.

In addition, further assistance to WATs is provided through reduced taxi licence rental fees, reduced stamp duty on new WAT vehicles, and greater vehicle maximum operating life compared to conventional taxis.

A different set of arrangements apply in the metropolitan zone. In addition to the \$10 lifting fee that applies in country areas, an arrangement has been in place since 2001 between the Government and the two major taxi networks in the metropolitan area to handle all wheelchair bookings in the Metropolitan Zone. They receive a range of service fees including:²¹⁹

- a booking fee of \$3.30 per booking
- a pick-up fee of \$1.10 per pick-up for passengers over 4 km away
- a depot fee of \$100 per WAT per 28 days

The contract with the depots is believed to include performance standards for telephone answering response time and for the time of arrival of the taxi at the pick-up point. However, performance against these standards is not monitored.

9.2.2 Views of stakeholders

Some stakeholders have expressed concerns about a perceived imbalance between the metro and country WAT supply-side subsidies:

There is a considerable anomaly in the provision of infrastructure and vehicle purchasing subsidies between metropolitan, urban and country operations. In order to achieve a high standard of service to wheelchair clients the Bendigo taxi depot has a separate WAT booking facility. A conservative estimate of staff costs for this activity is at least \$87,500. This is in comparison with Metro and Country operations that are subsidised for WAT bureau services or vehicle purchases.²²⁰

²¹⁸ VTD submission to the Inquiry into Response Times for Wheelchair Accessible Taxis

²¹⁹ Country taxi review, p.37. This arrangement is largely a legacy of arrangements previously in place before 2001 to support a separate and mandatory call centre for all WAT bookings.

²²⁰ Mr Peter Kealy, Bendigo public forum

Other issues expressed by stakeholders included:

- drivers should receive all of the \$10 lifting fee
- concerns about drivers activating the meter prior to loading a wheelchair customer into the vehicle – thereby ‘double dipping’ with respect to the lifting fee
- the lifting fee should be higher, or should be higher on public holidays.

9.2.3 Discussion of the issues

As mentioned, the provision of WATs is advantaged through lower licence rental costs and reduced stamp duty, and in certain circumstances other assistance is available for fitting out WATs. These advantages are intended to compensate for the higher cost of the vehicles and additional maintenance costs of lifting equipment. There also appears to be support for the view that some part of the lifting fee should compensate operators for additional maintenance costs of WAT vehicles. In other words, the lifting fee should not have the purpose solely of recompensing drivers for the additional time spent in customer pick-up and drop-off.

At the prevailing driver average hourly income, the fee would translate into 45 minutes of time, and since the additional time is unlikely to exceed 10-15 minutes, only part of the charge would be attributable to that purpose. A further additional cost is incurred in servicing a wheelchair booking due to additional distances that may typically be covered by a WAT to reach a customer compared to a conventional taxi booking. Depending on the bailment arrangements (e.g. whether the bailor or the bailee pays for the fuel), it may be appropriate that some part of the lifting fee may be shared between the driver and operator. Finally, the remaining part of the lifting fee will have the effect of providing greater incentives for drivers to attend to wheelchair jobs, and thereby support achievement of disability standards. Therefore, the allocation of that part of the lifting fee to the driver would be necessary to provide those incentives.

For these reasons, the Commission’s preliminary view is that the available information supports the allocation of the greater part of the lifting fee to the driver, as is presently the case. Under certain bailment arrangements (e.g. fixed pay-in) it would be appropriate for the whole of the lifting fee to be allocated to the driver. This view is dependent, however, on the assumption that future WAT licence rental fees will remain at a considerable discount to conventional licences.

In regard to the issue of ‘double dipping’, information should be gathered specific to WAT jobs, which should be audited to enforce the requirement that meters are not activated for WAT jobs until the customer has been placed in the vehicle.

The level of the lifting fee would appear to be adequate. Comparison with other jurisdictions indicates that lifting fees are not provided by the governments of New South Wales, Queensland, Western Australia or the Northern Territory. The ACT has a lifting fee of \$10 similar to Victoria, Tasmania has \$10-16, while South

Australia has an on-time bonus of \$5.²²¹ These observations suggest that there is not a strong case for increasing the lifting fee.

It was also argued by both wheelchair users and the VTA that alternative vehicle designs should be able to be used for WAT services.

The next section discusses alternative means of achieving mandatory disability standards. This may also affect the level of supply side subsidy section required, as discussed below.

9.2.4 Achieving mandatory disability standards

The government's role in facilitating adequate services for wheelchair users involves making available a sufficient number of WAT licences. An indication of the relative scarcity of these licences at the present time is provided by recent traded values for WAT licences. The average for the last 6 licences traded between November 2007 and February 2008 is an average value of \$419,200 each.

An issue of great importance in the provision of WAT services is the requirement under the *Disability Discrimination Act 1992* that Wheelchair Accessible Taxis (WATs) have the same response times as those for other taxis by the end of 2007. This requirement is likely to result in significant changes in the taxi industry.

Several recent studies suggest that the taxi industry is falling well short of this requirement. For example, the Allen Consulting Group reports that:

In public hearings across the nation WAT users consistently reported that response times for WATs are not the same as those for other taxis. The view was supported by the Australian Taxi Industry Association in their submission

...

The New South Wales Government reports in its submission that the average response time for WATs booked through the Zero 200 booking service in Sydney is 53 per cent longer than for a standard taxi service. This figure does not reflect the response times for all WAT journeys as many bookings are made directly with a driver²²²

The DHS submission highlighted such findings and concerns about widespread problems of severely late arrival or non-arrival of MPTP taxis.

The Disability Standards²²³ place the responsibility for meeting the performance standards onto taxi networks and cooperatives. However, it is not clear that depots

²²¹ Nicholls (February 2007) 'Transporting the Wheelchair Dependent – A Review of the Wheelchair Accessible Taxi Industry', p.51

²²² Allen Consulting Group (January 2008) 'Review of Disability Standards for Accessible Public Transport', pp.41-42

²²³ Disability Standards for Accessible Public Transport Guidelines

or networks can in practice be held responsible for the arrival of a WAT.²²⁴ The new accreditation arrangements provide specific responsibilities for networks in relation to WAT bookings which clarify their obligations. The Government clearly has an important role in providing for a sufficient number of WAT licences to meet the demand at the required performance standards.

The VTD has stated:

The Statewide ratio of wheelchair accessible taxis to wheelchair user population (as calculated from the Multi Purpose Taxi Program membership) is 1 accessible taxi for every 80 wheelchair users. ... Metropolitan Melbourne (including the Outer-suburban taxi zone), has a ratio of 1 accessible taxi for every 64 people in wheelchairs.²²⁵

On the other hand, a comparison between Australian jurisdictions of the proportion of WATs in each fleet in each capital city indicates that Melbourne has relatively fewer WATs than most other Australian capitals.²²⁶

In Victoria, the WAT taxi fleet represents approximately 8% of all taxis. Most of the work undertaken by these cabs is non-wheelchair work. Waiting times tend to be higher for wheelchair bookings because when a booking is made that specifically requires a wheelchair taxi, it is more likely that the WATs in service will be thinly dispersed across the metropolitan area, and the average distance from the closest WAT to the pick-up point will commonly be longer than that for the average conventional taxi job. For this reason, the number of WATs in service may need to be a high proportion of the total fleet if the Disability Standards are to be achieved.

This observation is supported by some studies in other countries. A study of the number of wheelchair accessible vehicles required in Paris to achieve specified performance standards indicated that substantial increases in the size of the WAT fleet are required to achieve small improvements in service performance standards.²²⁷ The Finnish Taxi Association considers that approximately 15% of the fleet as fully accessible vehicles is appropriate.²²⁸

An alternative approach to increasing the number of WATs in the taxi fleet is to have a smaller dedicated fleet of WATs. VTD has made the following comments in relation to this option:

²²⁴ Allen Consulting Group refers to a case in the Federal Magistrates Court which found that the taxi network has limited control over a WAT, and was unable to compel them to accept a booking. See: 'Transport (Taxi-Cab Industry Accreditation) Regulations 2007: Regulatory Impact Statement', p.15

²²⁵ VTD, submission to the Inquiry into Response Times for Wheelchair Accessible Taxis

²²⁶ Allen Consulting Group (January 2008) 'Review of Disability Standards for Accessible Public Transport', pp.41-42

²²⁷ OECD (2001) *Aspects Economiques De L'Accessibilite Des Taxis*, p. 45

²²⁸ OECD (2001) p.48

The VTD is of the view that a smaller fleet of wheelchair accessible taxis used solely for wheelchair bookings could be far more effective than a larger fleet performing a mix of wheelchair and non-wheelchair jobs. However, the cost of providing a dedicated fleet is significant and the current arrangement of mixed jobs enables operators to derive a reasonable income without further Government contribution.²²⁹

The Victorian Equal Opportunities and Human Rights Commission (VEOHRC) recommended that the VTD should develop a pilot program that replicates the South Australia system (see Box 9.1). The purpose of this pilot would be to implement a system that improves responsiveness in the provision of WATs. It was further recommended that a particular focus should be to collect data on the usage of the WATs to identify the likely future demand for wheelchair trips to assess adequacy of WAT numbers as well as monitor timeliness as a key feature for ensuring equal access to taxi services for people with a disability and older people.²³⁰

²²⁹ VTD, submission to the Inquiry into Response Times for Wheelchair Accessible Taxis

²³⁰ VEOHRC 2007, op.cit.,

Box 9.1 South Australian WAT system

South Australia has a separate, micro-managed WAT network, with reasonably high incentive payments for WAT drivers and also allows for WAT bookings to be reserved by drivers at the beginning of each day.

The SA Government pays WAT drivers a lift fee of \$5, conditional on the passenger being picked up within 30 minutes. In addition, an on time bonus of \$1 is paid to the WAT networks, such as Adelaide Access Taxis (AAT), for pick ups within twelve minutes of the booked time, and 50 cents is paid for pick-ups between 13-31 minutes after the booked time.

The SA Government also pays WAT networks a lump sum for each WAT it has on the road each year, to compensate for the higher level of intervention required for allocating bookings. The AAT booking system works as follows:

- All WATs have a two-way radio system to communicate with the dispatch operators;
- Passengers are able to request a particular driver;
- No private hirings occur outside the booking system;
- Drivers 'bid' for pre-booked pick-ups each morning, allowing them to choose pick-ups that provide them with as little dead running as possible;
- A dedicated micro-manager intervenes using the radio where necessary to allocate bookings;
- The micro-manager attempts to link pick-ups in such a way so as to minimise dead running; and
- The bookings call centre calls back customers if their taxi is running late, or when their booked time is unavailable, and gives passengers the option to consider a revised time.

Source: Victorian Equal Opportunity and Human Rights Commission (VEOHRC) 2007, Time To Respond: Realising Equality for People with a Disability Utilising Taxi Services, pp.36-37.

The approach of having a largely separate fleet dedicated to providing services primarily for severely disabled people appears to be increasingly a less preferred option overseas, for example, in Europe. This appears to be due to both this high cost of this option, and its propensity to entrench inefficiency and poor performance standards. For example, the OECD has stated:

it is in many ways a relic of the previous generation's views about providing mobility for disabled people. A different service, operated frequently in an inefficient way, offering a level of service which many non-disabled people would find completely unacceptable. Sadly, because they have little alternative, many disabled people accept these services without complaint. We should not; nor should we accept that, except in most extreme circumstances,

*disabled people be required to use a service distinguished from others by that fact alone: that it is for disabled people.*²³¹

Alternatives are to provide fully accessible taxis as part of, or as all of, the ordinary taxi fleet, or to provide an on-demand taxi sharing service designed mainly for disabled people, but usable by other (non-disabled) people as well. The latter includes various flexible transport services, some of which are particularly useful in more rural areas where there are diverse travel patterns, and include scheduled flexible-route demand-responsive minibus services, for example. Such services are increasingly being used or trialled in Europe. These types of services are discussed further below.

Where fully accessible taxis are provided as part of the ordinary taxi fleet, an important question is what proportion of the fleet needs to be fully accessible, or whether the whole of the fleet should be accessible. The answer to this question goes back to the performance standard. Put simply, the WAT fleet needs to be increased until the Disability Standard is met. The previously mentioned Finnish Taxi Association estimate of approximately 15% of the fleet appears to be the best of the available estimates.

A second issue is what supply-side subsidies are required. Importantly, the answer to this question may be that lower levels of subsidy may be required when WATs represent a higher proportion of the fleet. This is because the need for subsidies may be at its greatest where there is a relatively dedicated WAT fleet directed primarily to wheelchair work. Where wheelchair jobs are spread more widely across a larger proportion of the fleet, the financial viability of each cab is less exposed, and the relative inefficiencies of undertaking wheelchair jobs is reduced.

The existing subsidies to the two major Metropolitan networks would not appear to be required if WATs represent a larger proportion of the fleet, as the inefficiencies associated with operating a smaller and relatively more dedicated fleet of WAT taxis are unwound through the greater availability of WATs.

The Commission's preliminary view is that the Disability Standards will most likely and most efficiently be met by considerably increasing the proportion of WATs in the metropolitan taxi fleet. The preliminary conclusion is that the appropriate target is 15% of the metropolitan taxi fleet should be WATs. To increase the number of WATs to this level would require an additional 330 metropolitan WAT licences. In addition, once the planned conversion of 300 peak service licences to conventional licences is completed, a further 45 WAT licences would need to be released.

WAT licences should be issued at a discounted annual rental to annual licences. For example, in Western Australia, WAT licences are rented from the Government at 40% of the amount paid for a conventional licence. In Victoria, country WAT licences are leased at a 50% discount to standard taxi licences. Some other jurisdictions have higher discounts.

²³¹ OECD (2001), pp.50-51

Preliminary conclusions

The process for issuing WAT licences in future should have regard to the service quality performance of provided to wheelchair users compared to the standards achieved for able-bodied users. That is, more WAT licences would be issued if the Disability Standards requirements for equal service standards are not met.

Initially, to facilitate achieving the Disability Standards, an additional 330 metropolitan WAT licences should be issued to raise the proportion of WATs in the metropolitan taxi fleet to 15%.

This proportion of WATs in the metropolitan taxi fleet should be maintained as a minimum.

Alternative vehicle types should also be considered for use as WATs.

The subsidies currently paid to the two major metropolitan depots in relation to WATs would not appear to be required if the recommended increase in WAT numbers is adopted.

9.3 Community Transport

There is a growing demand for taxi services by non-profit service providers, including home and community care services, and these groups as a rule do not receive any specific taxi-related subsidies. The provision of contracts with such organisations to provide specific taxi transport services to relevant individuals 'is a direction for the future' for the taxi industry.²³²

At public forums in Bendigo and Morwell, country taxi operators indicated that publicly funded community transport services such as community buses for the elderly, were eroding patronage. Similar views have been expressed by Professor Des Nicholls:

A major concerns for the taxi industry is preserving the private for hire market against encroachment from nonprofit providers and subsidised public transport agencies, particularly in the case of involuntary taxi users.²³³

The Country Taxi Review Working Party made several recommendations intended to facilitate greater use of taxis to provide community services:

The use of the MPTP in conjunction with other Government funded programs is seen by many stakeholders as essential if the taxi

²³² Prof. Des Nicholls (March 2006) 'Issues Relating to Strategic Planning for the Australian Taxi Industry', prepared for the Australian Taxi Association, p.17

²³³ Prof. Des Nicholls (March 2006) 'Issues Relating to Strategic Planning for the Australian Taxi Industry', prepared for the Australian Taxi Association, p.18

industry is to successfully provide transport services for community groups and Government agencies.²³⁴

One of the issues relates to the efficiency of procurement of community transport services, and whether taxi services could effectively compete for contracts to provide more of these services. In its response to the Country Taxi Review, DOI expanded on this issue:

During the review there were numerous submissions and comments regarding the barriers preventing taxis from being more extensively used by the community groups and agencies that require transport services for their client. It was highlighted that many community groups or agencies when assessing the cost of transport alternatives regularly undertook only a partial cost analysis and as a result erroneously find that taxi fares were more expensive than community buses. ... The DOI supports the recommendation on developing consistent approaches for procurement of Government funded community transport. ... The DOI agrees with the Working Group that this will require a consistent approach, rather than what is currently an ad hoc approach to procuring community transport. It is noted that funding of community transport is provided by various agencies, such as DHS, DoE and DVC; however given the DOI's extensive experience in public transport procurement, it is the most suitable agency to lead and implement this initiative.²³⁵

These observations indicate that, according to DOI, appropriate procurement processes are not being adopted for community transport, including probity requirements around ensuring that these services are obtained at the lowest cost. On the other hand, DHS has indicated to the Commission that community transport is almost entirely in the hands of bodies which receive funding from several sources, only one of which is Government. The funds allocated by Government are not specifically directed to community transport projects, and it is implied that Government does not have direct jurisdiction over how the community groups allocate funds.

This question could be usefully examined further as part of a review specifically directed to public and community transport in regional and outer suburban areas.

A second issue that has been raised by stakeholders is the potential benefit of shared ride taxi services in the context of providing alternative forms of public transport, in regional areas or outer suburban areas.

There are concerns that a number of bus services in country towns are under-utilised, and that taxis (HOVs) could provide a comparable, or better service at lower cost. Specifically it was proposed to the Commission that HOVs could

²³⁴ Country Taxi Fare review, p.46

²³⁵ Victorian Country Taxi Review (May 2006) 'Department of Infrastructure Public Transport Division: Response to Working party Recommendations', p.10

operate along route corridors (rather than fixed routes) at scheduled times, and that users could book to use the transport, which would pick-up and let-off each customer at their doorstep.

DOI has previously expressed similar views:

Taxis have a role to provide 'scheduled' or 'on-demand' public transport services in low demand areas (i.e. where conventional buses are not appropriate)²³⁶

The types of services that could be contemplated are widely used in a number of community-based transport schemes in Europe and Canada. Examples of demand-responsive shared taxi services are found in the Netherlands and Britain²³⁷, and in the province of Quebec in Canada²³⁸. The experience of these jurisdictions with use of taxi-based public transport in rural areas deserves further examination.

The Commission sees considerable merit in the further exploration of the benefits and costs (including budgetary implications) of similar transport services in Victoria, and reviewing whether such services could represent a substitute for conventional bus services in some locations.

Preliminary conclusions:

The Commission recommends a review of community based transport services in Victoria. The Review could examine procurement of transport services, and should have particular regard to the benefits and costs of establishing scheduled shared-ride flexible route transport services, using mini-buses in some relatively low density towns or suburbs.

For example, the Essential Services Commission or VCEC could be directed to undertake such a review.

²³⁶ DOI (May 2006) 'Victorian Country Taxi Review: Response to Working Party Recommendations', p.1

²³⁷ OECD (2001) 'Economic Aspects of Taxi Accessibility'

²³⁸ D. Cartier (2007) Quebec: The Role of Taxis in Public Transport', in OECD (2007) '(De)Regulation of the Taxi Industry'

10 | BROADER CONSIDERATIONS

In addressing the terms of reference, the Commission has made a number of observations relevant to the regulatory framework for taxi cabs in Victoria. However, there is a risk in making recommendations with respect to parts of the regulatory framework to address specific issues, such as driver remuneration, without also having regard to the broader context of the regulatory framework as a whole, and how those recommendations fit into a wider regulatory reform program. The purpose of this chapter is to discuss this broader context.

In its 1999 National Competition Review, KPMG observed that the Victorian taxi industry was in a spiral of ever increasing regulation. Most of the developments in the industry over the last eight years have borne out this observation. Most disconcerting is the relationship between increasing regulation on the one hand, and the increasing degree of market power held by major network service providers and peak industry bodies, on the other. The Commission's recommended approach to the circumstances of the taxi industry today, is for the Government to progress pro-competitive reforms, wherever these can be identified, and wherever the case against doing so is insubstantial. The onus should be on the proponents of regulatory restrictions to demonstrate their public benefit.

A recent report by VCEC has also supported pro-competitive reform of the taxi industry.²³⁹

Consistently with this perspective, this chapter sets out a number of observations in relation to taxi industry regulatory reform.

10.1 The objectives of the regulatory framework

Firstly, it would be of practical benefit to have a clear statement of the objectives of the regulatory framework. For example, a relevant set of objectives might be to ensure²⁴⁰:

- A vehicle standard and driver customer service standard that meet the needs of the consumer
- Taxi waiting times that meet the needs of the consumer
- A fare that is acceptable to the consumer

²³⁹ VCEC (May 2008) 'A State of Liveability: An Inquiry into Enhancing Victoria's Liveability', Appendix E

²⁴⁰ The first three are from "Report on Review of the Taxi Industry Regulatory Structure in the Perth metropolitan Area" (June 2003), p.13

- Mobility and community accessibility for the elderly and disabled, and those without other means of transport.
- Taxi service standards for people with disabilities to be equal to those for able bodied people.

It is also important to make the objectives of facilitating competition, subject to the overall public benefit, an express objective. Competition may be within the taxi industry, between different taxi service providers, or between passenger transport modes, such as competition with public transport. When DOI states that its position is that 'taxis are complementary to scheduled public transport services while operating as self-sustaining business entities', it needs to be clarified that, aside from the restriction on taxis providing fixed route services, it is not an objective of taxi regulation to restrict the ability of taxi services to compete for passenger services, as this would be contrary to the competitive neutrality principle of National Competition Policy.

10.2 Discussion of aspects of the regulatory framework

The different types of taxi industry-specific regulations can be broadly categorised as:

- Safety and Quality of Service
- Entry Restrictions
- Fare Controls

The following comments are made about safety and service quality regulation and entry restrictions.

10.2.1 Regulation of service standards and safety

Service standards and safety regulation covers aspects such as consistent livery; vehicle inspections and maintenance, and maximum age; driver protection, and training and accreditation.

A preliminary conclusion has been made in relation to driver training, and it is noted that a Taxi Industry Safety Taskforce is currently working on initiatives to improve driver and passenger safety. The following further observations are confined to vehicle livery and vehicle inspections.

Livery

Consistent livery standards apply across all vehicles, including the mandatory yellow paintwork, as well as signs, lamps etc. Although taxi industry participants have raised concerns in the course of this Review that the livery standards impose significant costs on taxi operators, also of importance from the Commission's perspective is the potential effect of uniform livery on competition between taxi companies. Users find it relatively difficult to distinguish between taxi companies, and therefore their ability to form preferences and make choices between them is diminished. In this way, competition between the taxi companies can be impaired. Therefore, there may be merit in some relaxation of the livery standards which allows taxi businesses to more clearly identify themselves.

Vehicle inspections, maintenance and age limits

Customer satisfaction surveys indicate that vehicle condition is an important source of dissatisfaction. Taxi cabs are required to be inspected for roadworthiness every 12 months during the first four years of their operation, and every six months after that, and VTD also carries out random inspection of taxis. In 2006-07, VTD issued 4,696 vehicle defect notices²⁴¹, i.e. on average more than one vehicle defect notice for every cab in Victoria in that year. Given the high incidence of vehicle non-compliance, there may be benefit in more stringent periodic roadworthiness tests.

The age of vehicles that can be used as taxis is also restricted. The Productivity Commission has questioned the merits of such restrictions, arguing that with regular and routine vehicle inspections forming a legitimate part of the regulatory process, there is limited justification for imposing maximum ages for vehicles²⁴². It is possible that maximum vehicle age limits may encourage taxi operators to more intensively (and inefficiently) use taxis than they might otherwise.

10.2.2 Regulation of entry

The Commission has made a number of preliminary conclusions in relation to licence release. However, it remains to place these within the context of its broader views about entry regulation.

Statutory provisions relating to licence release

The licence release process recommended by the Commission would supplant the existing processes. Consistent with that conclusion, the Commission believes that the fundamental criteria governing the licence issuing process, as established in the Transport Act, are in need of reform.

The decision to release a licence is governed by s.143 of the Transport Act, which requires that the VTD, 'before granting or refusing to grant any application for a taxi-cab licence' must:

have regard primarily to the interests of the public generally including those of persons requiring as well as those of providing facilities for the transport of passengers

There is a concern (as expressed by KPMG in 1999) that this condition is not simply a test of net social benefit. It also contains a test in regard to the impact on existing taxi service providers or other public transport service providers. The effect of this test may be to limit competition against incumbent taxi service providers, or protect other modes of public transport services from competition from taxis.

The Commission considers that this aspect of the test is inappropriate as it contains an anti-competitive bias, as it gives greater weight to the welfare of incumbent passenger service providers than to competitive entrants, and by doing

²⁴¹ Allen Consulting Group (October 2008), p.11

²⁴² Productivity Commission 1999, *Regulation of the Taxi Industry*, Ausinfo, Canberra, p. 10-11.

so reduces the weight accorded to improving services to consumers of passenger transport. It is recommended that the test of issuing new licences should be based solely on the net social benefit.

The future of entry regulation in the longer term

The preliminary conclusions in this report regarding taxi licence release should be regarded as initial steps towards more deregulation of the taxi market with respect to competitive entry.

In regard to the longer term, the Commission has previously expressed support for the principles of previous reforms which have advocated industry deregulation. Appendix F provides a brief discussion of the experiences in taxi industry reforms in some other jurisdictions.

In summary, the experience suggests that the costs associated with restricting entry outweigh any benefits that might be achieved. The argument that supply restrictions are required to ensure quality of service does not appear to be supportable where service quality and safety regulations are in place. Entry controls are an indirect and inherently inefficient way to regulate quality and safety. This function is better served by dedicated quality regulations which specifically target areas of concern and clearly detail desired outcomes. Licence scarcity is not an essential condition to achieve these.

Therefore the Commission is of the view that a gradual process of pro-competitive reforms towards deregulation of the taxi market would be appropriate. The following observations are made in relation to competitive reforms that should be contemplated in the short term.

Pricing & service zones

Licences are applicable only to service a specific “zone” – the classes being metropolitan, outer-suburban (for coverage of areas around Dandenong and Frankston), urban (Geelong, Ballarat or Bendigo) and country (where licences are specific to individual townships). While taxis can drop passengers off outside a zone they are licensed for, they are precluded from collecting new passengers in those zones. This can result in inefficiency. The inability to collect a return customer can leave customers worse off for having to wait longer and also leaves those drivers and operators worse off through foregone income.

The continuing existence of the special Outer Suburban taxi zone, covering the areas surrounding Dandenong and Frankston, should be reassessed. Its amalgamation with the Metropolitan zone was recommended as far back as 1986 in the Foletta Report, which described the boundary as “illogical”²⁴³. As KPMG observed, the ‘metropolitan’ public transport network extends to areas past Dandenong and Frankston²⁴⁴. Most importantly, the metropolitan zone currently

²⁴³ Foletta, B. 1986, *Report of the Taxi Inquiry – Melbourne and Metropolitan Area*, Ministry of Transport, Melbourne, pp. 60-61.

²⁴⁴ KPMG Consulting 1999, op cit, p. 97.

has few competing network service providers, and the amalgamation of these zones may increase the degree of potential competition in network services.

Statutory provisions relating to affiliation with a approved depot

It has already been observed that the requirement that operators affiliate with a depot may impede competition from secondary networks. Hence the Commission has suggested that under the new accreditation processes there should be an emphasis on ensuring that there are no restrictions on the entry of network service providers or secondary networks within the approval processes.²⁴⁵

Credit card facilities

It is a licence requirement that all taxis be fitted with an EFTPOS terminal approved by the VTD. The general objective is to give passengers maximum choice in the payment methods available to them. However currently the only terminal approved for use is Cabcharge's EFTPOS system. The VTD has a non-exclusive contract with Cabcharge in relation to MPTP transaction processing.

This preferred position reinforces Cabcharge's dominance in the provision of in-vehicle electronic processing services for the industry. In consequence of this preferential position, Cabcharge is able to obtain a 10% fee for each credit card transaction, which some consider to be a relatively high royalty. Options should therefore be explored for introducing a greater degree of competition in the provision of taxi-cab credit card transaction systems.

Restrictions on vehicle types in the hire car market

It would be appropriate for a review to be undertaken into options for introducing new types of hire car licences covering other vehicle classes, such as WATs.

²⁴⁵ It is expected that there would need to be obligations under the accreditation arrangements for network service providers to either accept or off-load wheelchair bookings to operators with WAT capabilities.

APPENDIX A | TERMS OF REFERENCE

Transport Act 1983

Review of Taxi Fares 2007/08

I, Tim Pallas MP, Acting Minister for Public Transport give notice that in accordance with the provisions of section 186 of the **Transport Act 1983**, I have asked the Essential Services Commission to conduct an investigation into Victoria's taxi-cab fares and report on:

- i. the impact of further and sustained upward pressure on liquid petroleum gas (LPG) costs on taxi operators;
- ii. an appropriate price setting model to provide for automated fare adjustments for the next 3–5 years, including the timing of such adjustments;
- iii. the appropriateness of the taxi fare structure within the current market for taxi-cab services in Victoria;
- iv. whether a surcharge on taxi fares on New Year's Eve should form a permanent part of the taxi fare structure for non-metropolitan taxi-cabs and, if so, the amount of such surcharge;
- v. whether a surcharge on taxi fares should form a permanent part of the taxi fare structure where the hirer pre-books and is supplied a premium service taxi and, if so, the amount of such surcharge;
- vi. the distribution of taxi fare revenue and measures that may be considered by Government to improve taxi driver remuneration; and
- vii. information reporting by the taxi industry and performance measurement.

In its investigation and report, the Commission is to have regard to the following factors:

- a) the cost pressures on the industry regarding the increase in the price of LPG,
- b) the recommendations contained in the Commission's Report – 'Taxi Fare Review 2005' and the subsequent application of the CPI-X pricing model to taxi fares in 2006 and proposed to be applied in 2007;
- c) the review of the regulatory structure and operations of Victoria's country taxi industry undertaken by the Department of Infrastructure during 2005/06;
- d) the relevance and values of the individual components that, when combined in part or in full, make up the total taxi hiring charge – specifically these are the flagfall, time and distance rate, phone booking fee, Late Night Surcharge

(metropolitan taxi-cabs only), Late Night Extra (non-metropolitan taxi-cabs), New Year's Eve taxi fare surcharge (non-metropolitan taxi-cabs) and any Premium Service Surcharge currently applied in accordance with permit conditions issued by the VTD;

- e) the impact on Victorian business and the community including the impact of any proposed variations to taxi fares on the availability and affordability of taxi services to consumers; and
- f) the impact on taxi industry participants including licence holders, taxi operators, drivers and employees.

The following directions have been given under section 186 (4) of the Act:

- In conducting the investigation the Commission should have regard to the objectives in section 8 of the **Essential Services Commission Act 2001** where relevant.
- Except as otherwise directed by the terms of reference, the Commission is to conduct the investigation in a manner as described in section 187 of the **Transport Act 1983**.
- The Commission is to provide an interim report in respect of (i) above by 31 January 2008 (or as soon as possible thereafter) and submit its final report to the Minister for Public Transport by 30 June 2008.

This notice supersedes the terms of reference [Review of Taxi Fares 2007/08] published in the Victoria Government Gazette on 14 September 2007.

Tim Pallas MP

Acting Minister for Public Transport

APPENDIX B | ESTIMATED PRODUCTIVITY TREND

Price path formula

The relevant objective is to generate a price path equivalent to the outcome in an effectively competitive market. In these circumstances prices will track industry unit costs, including a normal rate of return on capital. The industry unit costs (UC) follow the path:

$$\text{(Equation B.1)} \quad \Delta P = \Delta UC = \Delta W - \Delta TFP$$

Where the symbol “ Δ ” means “proportionate change in”, and W is an index of input prices and TFP is the total factor productivity index for the industry.

As described in Appendix B of the Issues Paper, under the CPI-X approach:

$$\text{(Equation B.2)} \quad \Delta P = \Delta CPI - X;$$

$$\text{where: } X = [(\Delta TFP - \Delta TFP_E) - (\Delta W - \Delta W_E)];$$

And TFP_E is the total factor productivity for the economy as a whole; and W_E is the index of input prices for the economy as a whole.

The VTA has stated that under this second approach:

... often there is considerable effort in estimating the productivity growth rates, but significantly less attention is devoted to measuring the difference between the input price index for the industry and the economy.

However, the methodology used by the Commission in this Draft Report is based on equation B.1, rather than the CPI-X formula in equation B.2. Hence: $X = \Delta TFP$; the change in the TFP index for the taxi industry.

In order to give effect to this approach it is necessary to derive an index of input prices, W , and to estimate productivity trends in the taxi industry alone, and employ these to estimate unit cost trends in accordance with equation B.1.

Composite input price index

The index of input prices, W , has been estimated using a specifically constructed index which weights together the prices of inputs by their shares in industry costs to derive an index of input prices. The aggregation formula for the composite input price index is:

(Equation B.3)
$$\Delta W = \sum_k s_k \ln\left(\frac{w_{kt}}{w_{kt-1}}\right)$$

Where s_k is the share of input k in taxi operator costs excluding licence assignment fees, and w_k is the price index of input k .

The input price deflators used for calculating the composite input price index are:

- For driver incomes, the ABS Labour Cost Index (i.e. Wage Price Index), Transport industry sector.
- For Motor vehicles, repairs and maintenance, tyres and washing the deflator is the Private Motoring Index (PMI) in the CPI, Melbourne.
- For Fuel (LPG), the price of LPG published by FuelTrac is used.
- For Insurances, the Insurance Index in the CPI, Melbourne.
- Other inputs, including network fees, office, uniform and other costs, are deflated using the CPI – All Groups, Melbourne.

The cost share weights used for constructing the composite index are based on the 2004 PwC survey, and shown in Table 4.3 earlier. As mentioned, licence assignment costs are not treated as an input for the purpose of constructing this index.

Table B.1 **Composite Input Price Index (Dec 2000– Mar 2007)**

	<i>WPI-Trans</i>	<i>CPI-Melb</i>	<i>PMI-Melb</i>	<i>INS-Melb</i>	<i>LPG</i>	<i>Composite Input Price Index</i>
Weights	56.9%	21.0%	11.2%	3.0%	7.9%	100%
Dec-2000	87.9	89.0	91.9	92.5	136.8	91.9
Mar-2001	88.5	90.0	92.0	93.9	127.4	91.9
Jun-2001	88.7	90.5	93.8	92.5	115.6	91.7
Sep-2001	89.7	90.9	91.6	95.6	103.9	91.4
Dec-2001	90.0	91.8	91.8	94.3	103.6	91.7
Mar-2002	90.6	92.6	92.1	96.3	101.5	92.2
Jun-2002	90.9	93.2	94.1	96.6	96.5	92.3
Sep-2002	91.7	93.8	93.2	96.9	97.2	92.9
Dec-2002	92.9	94.6	94.5	97.1	124.4	95.7
Mar-2003	93.7	95.9	96.7	96.2	127.4	96.9
Jun-2003	93.9	95.9	94.1	95.6	101.8	95.0
Sep-2003	95.3	96.5	95.2	98.3	90.2	95.2
Dec-2003	96.1	96.7	94.3	97.1	92.6	95.8
Mar-2004	96.7	97.7	95.1	97.0	94.7	96.6
Jun-2004	96.9	98.0	97.1	97.5	91.6	96.7
Sep-2004	98.0	98.2	97.5	97.8	98.9	98.0
Dec-2004	98.7	98.9	99.0	97.9	119.0	100.2
Mar-2005	99.7	99.7	98.0	98.0	101.6	99.6
Jun-2005	100.0	100.0	100.0	100.0	100.0	100.0
Sep-2005	101.3	101.2	104.1	103.1	104.9	101.9
Dec-2005	102.3	101.6	103.3	107.2	123.6	103.9
Mar-2006	103.4	102.5	104.8	107.6	142.2	106.1
Jun-2006	103.8	103.9	108.7	109.2	127.8	106.3
Sep-2006	105.0	104.6	109.0	113.3	126.8	107.2
Dec-2006	106.2	104.5	104.4	109.6	117.5	106.6
Mar-2007	107.2	104.7	105.0	109.1	121.5	107.6
Jun-2007	108.3	105.9	108.2	110.5	125.1	109.1
Sep-2007	109.5	106.8	107.7	113.9	125.4	110.0
Dec-2007	110.5	107.9	110.7	113.9	149.0	112.7
Mar-2008	111.9	109.3	112.4	116.9	171.3	115.4

^a All indices rebased to June 2005 = 100.0: Sources: PwC (weights), ABS, Fueltrac

Outputs, inputs & total factor productivity

TFP is defined as the ratio of the index of all outputs to the index of all inputs. The usual method of estimating TFP trends involves defining the set of outputs and of inputs and measuring these over time.

The year to year percentage changes in the individual outputs are weighted by their respective shares or contributions to revenue, while the inputs are weighted by their cost shares.

For example, outputs might include:

- the number of trips – which generates revenue from flag-fall charges
- the number of paid kilometres driven – corresponding to the variable charge
- the number of bookings – which corresponds to the booking fee

However, none of the data for these outputs are regularly collected, and due to the limited information available, a single measure of output has been used, which has been derived by deflating survey-based revenue data by an index of taxi fares. The taxi fare index was derived based on the percentage increases in fares implemented at specific dates, and has been constructed as a quarterly index of average fares.

Hence the output index is given by:

$$\text{(Equation B.4)} \quad Q = R/P$$

where Q is output per cab; R is revenue per cab; and P is the taxi fare index.

In regard to inputs, the main inputs are those that correspond to the cost components. As information is available on total costs from the PwC studies, the input quantities index can be inferred from information available on total costs and the input price index. That is, by deflating operating costs per cab by the composite input price index:

$$\text{(Equation B.5)} \quad M = C/W$$

Where C is an index of total cost and M is an index of input quantities.

The changes in the TFP index can be estimated directly from the definition of the TFP index:

$$\text{(Equation B.6)} \quad \Delta TFP = \Delta Q - \Delta M$$

Unit Costs & Productivity

The calculated productivity trend is particularly dependent on the chosen input price index. This is shown in Equation B.1. The derivation of equation B.1 is as follows. By definition:

$$\text{(Equation B.7)} \quad UC = C/Q.$$

The index of costs per cab, C, can be expanded into the product of the input price index, W, and the index of input quantities, M. ie: $C = W.M$. Therefore: $UC = W.M/Q = W/TFP$. This shows the derivation of equation B.1 (which is the same equation in log form).

Note that the definition of unit costs in equation B.7, stated above gives:

$$\begin{aligned} \text{(Equation B.8)} \quad \Delta UC &= \Delta C - \Delta Q \\ &= \Delta C - (\Delta R - \Delta P) \end{aligned}$$

The latter step is based on equation B.4. Hence movements in unit cost are calculated based only on the survey data and the fare index – which are all directly observed data.

The input price index, on the other hand, has been estimated using proxy indices. To the extent that this index is inaccurate in measuring actual input prices, this will be reflected in the estimated TFP.

Results

The results are shown in Table B.1.

Table B.2 **Estimated Taxi output, input and productivity indices**

	2000	2004	2007	Δ 2000-2004 (%)	Δ 2004-2007 (%)	Δ 2000-2007 (%)
Revenue per cab (\$ per cab)	126,194	132,566	142,823	1.2	2.5	1.8
Cost Per Cab (including average 2000 and 2004 assignment fees) (\$ per cab)	122,091	127,142	129,090	1.0	0.5	0.8
Taxi Fare Index ^a	100.0	114.2	127.4	3.4	3.7	3.5
Composite Input Price Index	88.7	97.9	109.9	2.1	3.9	3.1
Output Index ^b	100.0	92.0	88.8	-2.1	-1.2	-1.7
Input Index ^b	100.0	94.4	85.4	-1.4	-3.3	-2.2
Productivity Index ^b	100.0	97.5	104.1	-0.6	2.2	0.6
Unit Costs Index ^b	100.0	113.2	119.0	3.2	1.7	2.5
Number of licences (est.)	3,906	4,188	4,651	1.8	3.6	2.5
Index of Market Demand ^b	100.0	98.6	105.7	-0.3	2.3	0.8

^a March 2000 = 100.0

^b Calendar 2000 = 100.0

Sources: Essential Services Commission (June 2005) *Final report: Taxi Fare Review 2005*, p.44 & p.37; PwC 2007 survey results

APPENDIX C | JURISDICTIONAL COMPARISON OF TAXI FARE STRUCTURES

Table C.1 **Comparison of fare structures between jurisdictions (May 2008)**

<i>Jurisdiction</i>	<i>Fare Item</i>	<i>Metro</i>	<i>Regional</i>	<i>Country</i>
Victoria	Flagfall	\$3.20	\$3.20	\$3.20
	Distance / km	\$1.526	\$1.60	\$1.64
	Waiting time / min	\$0.547 (<21 km/hr)	\$0.547 (<20.5 km/hr)	\$0.547 (<20 km/hr)
NSW	Flagfall	\$3.00	-	\$3.50
	Distance / km	\$1.79	-	Tariff 1: \$1.83 (first 12 km) Tariff 2: \$2.57 (> 12 km)
	Waiting time / min	\$0.77 (<25.81 km/hr)	-	\$0.787 (<25.79 km/hr)
QLD²⁴⁶	Flagfall	Tariff 1: \$2.50 (weekday 7am-7pm) Tariff 2: \$3.80 (other times) ¹	Tariff 1: \$2.50 (weekday 7am-7pm) Tariff 2: \$3.80 (other times) ²	Tariff 1: \$2.50 (weekday 7am-7pm) Tariff 2: \$3.80 (other times) ³
	Distance / km	\$1.74	\$1.83	\$1.74
	Waiting time / min	\$0.64	\$0.64	\$0.64
WA	Flagfall	Tariff 1: \$3.30 (weekday 6am-6pm) Tariff 2: \$4.80 (other times)	-	Tariff 1: \$3.30 (weekday 6am-6pm) Tariff 2: \$4.80 (other times)
	Distance / km	\$1.35	-	\$1.35 (+\$0.83 per km surcharge)
	Waiting time / min	\$0.644	-	\$0.644
SA	Flagfall	Tariff 1: \$2.90 (weekday 6am-7pm) Tariff 2: \$4.50 (other times)	-	**

²⁴⁶ Source: Queensland Transport 2007, *Queensland Taxi Fares effective 15 December 2007*, <http://www.yellowcab.com.au/content/?id=40>

<i>Jurisdiction</i>	<i>Fare Item</i>	<i>Metro</i>	<i>Regional</i>	<i>Country</i>
TAS ²⁴⁷	Distance / km	Tariff 1: \$1.42 Tariff 2: \$1.56	-	**
	Waiting time / min	\$0.535	-	**
	Flagfall	\$3.10	-	\$3.10
	Distance / km	Tariff 1: \$1.63 (weekday 6am-8pm) Tariff 2: \$1.95 (other times)	-	Tariff 1: \$1.59 (weekday 6am-8pm) Tariff 2: \$1.92 (other times)
ACT	Waiting time / min	\$0.54	-	\$0.54
	Flagfall	\$4.00	-	-
	Distance / km	Tariff 1: \$1.64 (weekday 6am-9pm) Tariff 2: \$1.89 (other times)	-	-
NT ²⁴⁸	Waiting time / min	\$0.75	-	-
	Flagfall	Tariff 1: \$3.95 (weekday 6am-5.59pm) Tariff 2: \$4.70 (other times)	Tariff 1: \$3.70 (weekday 6am- 5.59pm) Tariff 2: \$4.80 (other times)	Tariff 1: \$3.35 (weekday 6am-5.59pm) Tariff 2: \$4.10 (other times)
	Distance / km	Tariff 1: \$1.309 Tariff 2: \$1.610	Tariff 1: \$1.568 Tariff 2: \$1.960	Tariff 1: \$1.610 Tariff 2: \$1.908
	Waiting time / km	\$0.7595	\$0.75	\$0.606

Note: for vehicles carrying no more than 5 passengers; [1] QLD South East QLD metered areas; [2] QLD regional metered areas; [3] QLD exempted areas; [4] TAS applies to taxi areas other than Hobart, Launceston, Burnie, Devonport, Ulverstone, King Island and Flinders Island

Sources: See sources Table 5.2

²⁴⁷ Source: PwC phone communication with the Department of Infrastructure, Energy and Resources 30 April 2008.

²⁴⁸ Source: Northern Territory Transport Group <http://www.nt.gov.au/transport/taxi/tariffs/index.shtml>

Note: metro based on Alice Springs and country based on Katherine tariffs.

** Fares in country areas of South Australia are unregulated

Table C.2 **Summary of Surcharges in Australia**

<i>Jurisdiction</i>	<i>Fare Item</i>	<i>Metro</i>	<i>Regional</i>	<i>Country</i>
Victoria	Phone booking	\$1.40	\$1.40	\$1.40
	Late night	20% (metro), \$1.40 (outer suburban zone)	\$2.80	\$2.80
	New Years Eve	-	\$5.50	\$5.50
NSW	Phone booking	\$1.60	-	\$1.0
	Late night	20% on distance rate	-	20% on distance rate
	Luggage	\$0.10 for each kg >25 kg. - Maximum payable \$0.55	-	\$0.10 for each kg >25 kg. Maximum payable \$0.55
	New Years Eve	-	-	20% on distance rate
QLD	Phone booking	\$1.10	\$1.10	\$1.10
	Late night / holiday	See Tariff 2 (Table 5.1)	See Tariff 2 (Table 5.1)	See Tariff 2 (Table 5.1)
	Return to boundary	Double fare (trips >40km)	Double fare (trips >40km)	Double fare (trips >40km)
	Multiple hiring	75% of fare at destination	75% of fare at destination	75% of fare at destination
WA	Phone booking	\$1.50	-	\$1.00
	Late night / holiday	See Tariff 2 (Table 5.1)	-	See Tariff 2 (Table 5.1)
	Multiple hiring	75% of fare at destination	-	75% of fare at destination
	Ultra Peak Surcharge	\$2.00	-	\$2.00
	(Friday & Saturday nights - midnight to 5am)			
	Xmas day	\$4.00	-	\$4.00
	New Year's Eve	\$4.50	-	\$4.50
ACT	Phone booking	\$0.00	-	-
	Late night / holiday	See Tariff 2 (Table 5.1)	-	-

Note: carrying no more than 5 passengers

Source: VTD website; NSW Ministry of Transport²⁴⁹; Queensland Transport (provided by email); Taxi Council of WA²⁵⁰; ACT Territory and Municipal Services²⁵¹.

²⁴⁹ <http://www.transport.nsw.gov.au/taxi/fares.html>

²⁵⁰ <http://www.tcwa.com.au/servtaxifares.html>

²⁵¹ http://www.tams.act.gov.au/move/public_transport/taxi_services_and_information/taxifares

The information on trip length profiles used in this report (and shown in Table 4.4) is based on information from the Victorian Activity and Travel Survey (**VATS**) for 1994 to 1999. This information has been prepared and provided to the Commission by the Department of Infrastructure (**DOI**).

The VATS data includes residential travel trips, and does not include tourist trips and may not include some or even most corporate travel.²⁵² Table D.1 summarises the VATS data on the average daily number of trips for each mode of transport, including taxis, for each trip length category for the period 1994 to 1999.

The use of this information from the VATS database for the analysis in this report is based on the assumption that the relative composition of taxi trips in terms of distances travelled can be assumed to have remained relatively stable since the 1990's. This assumption is supported by the taxi trip-length profiles from the ABS Journey to Work data for 1996, 2001 and 2006. These profiles are shown in Figure D.1 below.

The ABS data is less broad based (limited to journeys to work), and is based on trip frequency data and trip length estimates at the SLA level, rather than from individual households. It is therefore unsuitable for measuring a trip length profile for the taxi market. However comparisons over time suggest that there has been some stability in the trip length profile. This stability confirms that the VATS database remains a suitable source of data to use for the profile of taxi trips by trip length.

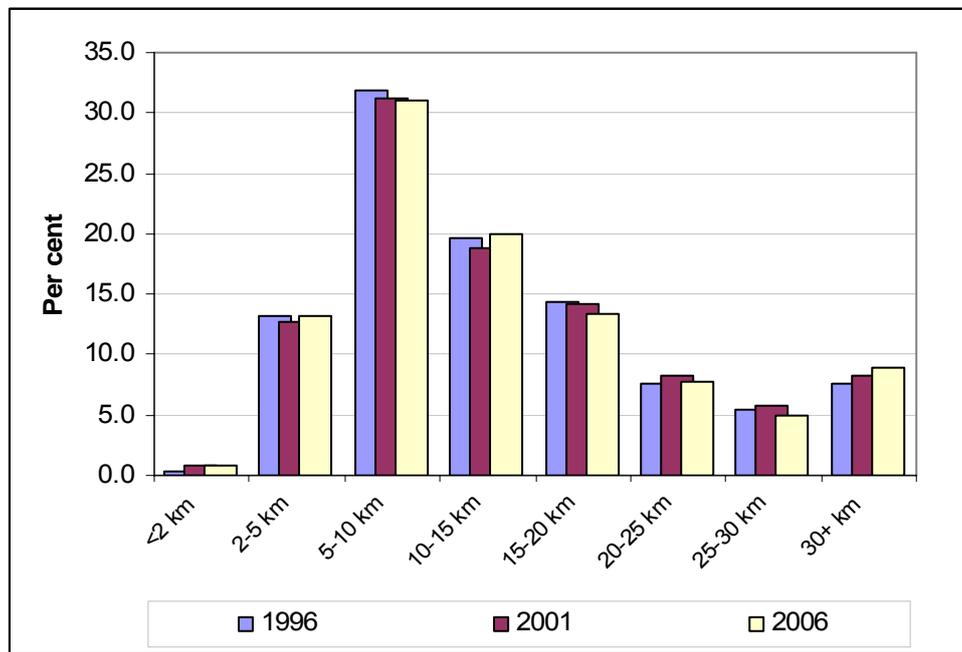
²⁵² The implied average number of residential taxi trips per annum is 16 million, which is believed to represent approximately two-thirds of the total annual demand for taxi services in the 1994 to 1999 period.

Table D.1 **Residential travel trips per day by mode & distance**
(average per day 1994 to 1999)

<i>Time of day</i>	<i>Trip length (km)</i>	<i>Taxi</i>	<i>Passenger car</i>	<i>Public transport</i>	<i>Other</i>	<i>Total</i>
Day (6am to 6pm)	missing	2,074	140,060	12,029	29,467	187,932
	0 - 1.9	3,419	1,937,303	26,422	1,615,434	3,585,034
	2 - 4.9	6,911	1,784,140	108,448	153,889	2,055,615
	5 - 9.9	5,444	1,250,248	149,264	44,935	1,450,685
	10 - 14.9	1,695	626,835	96,423	15,536	740,978
	15 - 19.9	862	369,381	66,405	8,336	445,272
	20 - 24.9	636	232,937	51,543	5,196	290,646
	25 - 29.9	696	157,874	32,549	3,449	194,784
	30+	1,000	378,723	71,802	13,888	465,951
Group Total		22,737	6,877,500	614,884	1,890,131	9,416,896
Night (6pm to 6am)	missing	693	23,042	1,234	3,945	29,450
	0 - 1.9	1,609	368,551	1,796	180,332	552,437
	2 - 4.9	6,239	409,281	6,925	23,800	446,810
	5 - 9.9	5,915	331,664	14,693	6,958	359,279
	10 - 14.9	3,015	172,451	10,207	2,228	187,974
	15 - 19.9	1,206	107,185	8,018	1,777	118,550
	20 - 24.9	667	68,312	4,547	931	74,545
	25 - 29.9	727	43,911	3,153	582	48,373
	30+	606	101,299	6,874	2,041	111,046
Group Total		20,677	1,625,695	57,445	222,593	1,928,465
Missing		308	61,265	8,785	23,214	102,659
Total		43,722	8,564,460	681,115	2,136,038	11,448,020

Source: DOI, VATS

Figure D.1 Taxi journeys to work by length (per cent)



Source: ABS Census journey to work data

The Commission has undertaken a limited analysis of demand elasticity. The analysis uses ABS Census data for Journeys-to-Work in 1996, 2001 and 2006. Although this data is relatively narrow in scope, being limited to only one journey purpose (i.e. travel to work), it is the only data set the Commission has been able to identify which covers a sufficiently long period of time, and with sufficiently detailed data, for an analysis of this type. To the extent that demand characteristics for users of taxis for this purpose are not representative of the entire market, then the results will also not be representative.

The benefit of using the Journeys-to-Work data is that it spans the period between 1996 and 2006, with a significant change in the fare structure over that period – with the flag-fall charge increasing by 16% and the distance-based charge increasing by 60%.

Description of the data

The Journeys-to-Work data used by the Commission contains the enumeration of journeys from the Statistical Local Area (**SLA**) of origin to the destination SLA by mode of transport. Note that for many journeys the SLA of origin and destination will be the same, so the data set contains both journeys within SLAs and journeys between them.

DOI provided a data table with the average distances of car journeys in the same format – that is, with the SLA of origin and the SLA of destination, including average trip distances for journeys within SLAs. This data was limited to the metropolitan area. For this reason the analysis of the Journeys-to-Work data was confined to the metropolitan area.

The data for journey distances was used to calculate an average taxi fare for taxi trips between each SLA origin and destination pair in the metropolitan area.

The data for distances, fares and Journeys-to-Work at SLA level was then aggregated into trip length categories as shown in Table E.1. For this purpose every SLA origin-destination pair was assigned to one of the trip length categories. The enumeration of journeys by taxis and other modes simply involved summing the trips for all of the SLA origin-destination pairs that fell within each trip length range. In the case of the average taxi fare, the weighted average of the relevant fares calculated for each SLA origin-destination pair was calculated for each trip length range.

Model

A demand function for taxi services has been modelled using multiple regression analysis with the data presented in Table E.1. The chosen specification for the demand function was the log-linear model. This specification follows John R Schroeter (1983), who uses a log-linear specification. Due to the limited number of degrees of freedom in the data set, other specifications have not been tested.

In the log-linear model, the log of taxi trips is a function of the log of taxi fares; the log of the Private Motoring Index (**PMI**); and the log of total trips, all modes. There are also dummy variables representing the different trip length ranges. This means there are separate demand functions for each trip length type, but the specification imposes the same demand elasticity for each type.

The estimated model is presented in Table E.2. Of significance is the estimate of the price elasticity of taxi demand of -0.5 . This estimate falls within the range suggested by Booz Allen Hamilton for the NSW market of -0.3 to -0.8 .

The Commission's analysis is limited in terms of both the depth of analysis undertaken, which was limited to testing a single specification, and the data, which covered only one section of the market. Furthermore, the data available was not extensive enough to support an analysis of whether the demand elasticity varies between different types of user, or different types of trips. Therefore, while this analysis contributes something further in relation to information on demand elasticity for taxi services in the Victorian taxi market, it is not conclusive. There remains a wide range of uncertainty about demand responses to changes in taxi fares.

Table E.1 **Metropolitan journeys-to-work by mode & distance, and average taxi fares**

	<u>1996</u>			<u>2001</u>			<u>2006</u>		
	<i>Taxis</i>	<i>Other modes^a</i>	<i>Average fare</i>	<i>Taxis</i>	<i>Other modes^a</i>	<i>Average fare</i>	<i>Taxis</i>	<i>Other modes^a</i>	<i>Average fare</i>
0 - 1.9	12	84	3.6	30	329	4.3	32	656	5.0
2 - 4.9	581	64,920	6.7	474	68,753	8.6	524	71,506	9.3
5 - 9.9	1,397	238,933	9.5	1,166	250,461	12.7	1,229	264,483	11.8
10 - 14.9	861	196,095	13.8	705	211,562	19.2	792	226,123	20.9
15 - 19.9	634	186,034	18.4	529	196,054	25.5	534	208,128	27.7
20 - 24.9	336	119,002	22.8	311	129,736	32.2	309	140,088	35.0
25 - 29.9	236	102,389	27.3	215	112,669	39.1	196	123,344	42.3
30+	333	142,204	39.2	306	156,132	54.1	353	174,623	59.0
Total ^b	4,390	1,049,661		3,736	1,253,696		3,969	1,208,951	

^a includes any combination of transport methods which include a car, excluding taxis, and all other transport methods except 'walked only'.

^b a small number of SLA origin-destination pairs for which distance data was zero were excluded. These accounted for only 371 trips by all modes

Source: ABS census

Table E.2 **Econometric model of taxi journeys to work**
(dependent variable = log of all taxi JTW trips)

	<i>Coefficient</i>	<i>t-Statistic</i>
Intercept	0.4454	0.3281
log of total JTW trips all modes	0.6117	9.8996
log of taxi fare	-0.5146	-2.6145
log of PMI ^a	-0.0088	-0.0260
dummy (2-5 km)	0.1231	0.3346
dummy (5-10 km)	0.3733	0.8006
dummy (10-15 km)	0.2380	0.4749
dummy (15-20 km)	0.0989	0.1862
dummy (20-25 km)	-0.0993	-0.1830
dummy (25-30 km)	-0.3091	-0.5485
dummy (30+ km)	0.0901	0.1434
Adjusted R Square	0.9957	
Standard Error	0.0772	
Observations	24	

^a the ABS Private Motoring Index for Melbourne, average of 4 quarters for calendar years 1996 (121.1), 2001 (133.45) and 2006 (154.325).

Source: ESC

Table E.3 **Econometric model of taxi journeys to work**
(dependent variable = log of all taxi JTW trips)

	<i>Coefficient</i>	<i>t-Statistic</i>
Intercept	0.49982	0.378706
log of total JTW trips all modes	0.637602	10.10272
log of taxi fare	-0.75009	-2.8782
log of PMI	0.017397	0.052811
dummy (2-5 km)	0.063521	0.176229
dummy (5-10 km)	0.25062	0.542067
dummy (10-15 km)	0.052771	0.104227
dummy (15-20 km)	-0.20928	-0.36982
dummy (20-25 km)	-0.55279	-0.8807
dummy (25-30 km)	-0.92805	-1.29161
dummy (30+ km)	-1.35605	-1.0878
log of taxi fare × distance	0.010001	1.3303
Adjusted R Square	0.995948	
Standard Error	0.075059	
Observations	24	

Source: ESC

Critics of taxi industry deregulation have routinely argued that any policy recommendations that conclude in favour of reform are based exclusively on theory, and do not take into account the experiences from deregulation elsewhere. The purpose of this Appendix is to specifically address this question. Deregulation has been attempted elsewhere in Australia and in other markets around the world, providing useful case studies to consider when making any proposals for the Victorian industry. While there can be no doubt that some governments have experienced problems, this has not been the universal outcome of deregulation.

This Appendix discusses a limited selection of relevant taxi industry reforms attempted in jurisdictions outside Victoria, including:

- The Northern Territory, which commenced industry deregulation in response to the territory's NCP review
- New Zealand, which rapidly deregulated its taxi industry in the late 1980s, and is best defined by its system of 'posted prices'; and
- The Netherlands, which adopted a more cautious approach, sequentially deregulating the taxi industry over a number of years.

F.1 Deregulation in the Northern Territory

Following its NCP review in 1997/98, the Northern Territory attempted the most ambitious deregulation programme out of any jurisdiction in Australia. At its core, the reforms sought to remove barriers to entering the industry. The government decided to compensate existing licence holders by way of a buy-back of licence plates, at a cost of approximately \$25 million²⁵³. This was to be funded through the levying of new licence fees, with licences to be leased annually from the government. It was expected that the licence fees would generate sufficient revenue to meet the cost of the buy-back within 8 – 9 years, however the NCC noted that it was likely to exceed 10 years²⁵⁴. Although supply restrictions on issuing licences were reduced, fares continued to be regulated.

The immediate impact of deregulation was an increase in the quantity of taxi-cabs – within 12 months of the territory's reforms, the number of licences issued had

²⁵³ Nicholls, D. 2003, *The Impact of Deregulation on the Northern Territory Commercial Passenger Vehicle Industry*, Australian National University, ACT, p. 3.

²⁵⁴ Deighton-Smith, R. 2002, *Reforming the Taxi Industry in Australia*, Staff Discussion Paper, National Competition Council, November, p. 11.

jumped from 138 to 182²⁵⁵. Part of this increase, it should be noted, was a result of hire cars converting to taxi-cabs given industry deregulation. This supports the need for equal regulatory treatment between the two related industries. Nevertheless, there was no commensurate increase in demand, and average vehicle utility rates declined resulting in a reduction in driver earnings – reportedly as low as \$4 an hour in some instances²⁵⁶. It was considered that while the quantity of services had increased, their quality had declined.

Many reviews of the taxi industry have tended to identify the importance of strong quality regulations as part of any approach to economic deregulation. The Northern Territory is a case in point. Deregulation was undertaken largely without service quality regulation. This proved problematic and resulted in the government re-intervening in the market. In the absence of quality controls, much of the community appeared to regard the broader industry deregulation programme a mistake.

With a change in government in August 2001 came a new response to taxi industry in the Northern Territory. A moratorium was imposed on new licences, once again imposing entry restrictions. The new government later established a target service ratio of one cab for every 900 people in Darwin and Alice Springs (the two largest markets). The effect of this was a re-limiting of competition, with a larger number of taxi-cabs than this already servicing the community. The NCC noted with concern that industry participants (and thus taxi users) were still paying the licence fees to compensate for the buy-back, even though this had since been made redundant by re-regulation²⁵⁷.

In its 2005 assessment, the NCC stated:

*It remains the case that the Northern Territory re-introduced restrictions on competition without providing a robust public interest case. The industry is still paying for a compensation package that was not carried to fruition because the government reacted to industry concerns. The industry would likely have settled at an appropriate equilibrium level had the program not been terminated: It is not uncommon in situations where regulation has eliminated market signals for liberalisation to result in a short term 'overshooting' supply response.*²⁵⁸

This position supports the view that deregulation itself was not the problem per se, but rather its implementation. Problems may have arisen due to the immediate rather than gradual approach taken to the reforms, as well as the continued regulation of fares, limiting the scope for price competition. Given more time, and certainly with a reliance on quality regulation rather than entry restrictions, it is

²⁵⁵ Nicholls, D. 2003, op cit, p. 17.

²⁵⁶ Id. at p. 19.

²⁵⁷ NCC 2004, op cit, Ch. 9, p. 15.

²⁵⁸ National Competition Council (NCC) 2005, *Assessment of governments' progress in implementing the National Competition Policy and Related Reforms: 2005*, AusInfo, Canberra, Ch. 18, p. 4.

likely that the adverse outcomes experienced in the Northern Territory could have been overcome.

F.2 Deregulation in New Zealand

Reform of the taxi industry in New Zealand took place as part of a broader wave of economic liberalisation during the 1980s. Similarly to the Northern Territory, deregulation was rapidly implemented. By contrast however, the removal of entry barriers was not accompanied by a buy-back scheme – no compensation was provided to existing licence holders²⁵⁹. Also unlike in the Northern Territory, the fare structure was deregulated as well. These reforms did not bring about a ‘free-for-all’ in pricing however, with a policy of ‘posted prices’ adopted by the government. This requires operators to advise the regulator – the Land Transport Safety Authority (LTSA) – of the fares they propose to charge, and to then post these inside and outside their taxi vehicles to notify passengers.

New Zealand is regarded as a success story in terms of taxi industry deregulation. In the ten years following deregulation, the number of taxis increased from approximately 2,750 to in excess of 7,100²⁶⁰. Apart from initial transitional issues, this was not accompanied by a degradation of service quality. All taxi operators must belong to an authorised taxi organisation (ATO), and drivers face local knowledge requirements. Consumer rights are protected not only through posted prices, but also with the provision of contact details for the relevant ATO within the taxi vehicle, allowing passengers to direct any service complaints they may have to them.

Increased competition resulted in changes to the fare structure. Booking fees were largely removed by most companies as fare structures were simplified to make comparisons easier for consumers. Hooper reported that one firm had introduced a customer loyalty card reducing the per kilometre distance rate from NZ\$1.30 to \$1.00²⁶¹. Nevertheless, despite a nationwide average of approximately 1.9 taxis per 1,000 people – regarded as high by international standards – deregulation has not resulted in a substantial fall in taxi fares²⁶². The Wellington market has recorded only a modest decline in real terms, while Auckland has lower fares (in nominal and real terms) due to higher levels of competition (some 2.8 taxis per 1,000 people). It is reported that some urban communities in provincial New Zealand have observed fare increases²⁶³. While there is no clear data, the taxi industry acknowledges a real increase in per capita income since deregulation²⁶⁴.

²⁵⁹ Productivity Commission 1999, op cit, p. 32.

²⁶⁰ EIM Business & Policy Research 2002, *Taxi abroad: An inventory of experiences with regulated and deregulated policies abroad*, Part 1: Analysis Report, Netherlands Ministry of Transport, Public Works and Water Management, Zoetermeer, April, p. 41.

²⁶¹ Hooper, P. 1999, op cit, p. 65.

²⁶² Ibid.

²⁶³ Kang, C-H. 1998, *Taxi Deregulation: International Comparison*, Dissertation, University of Leeds, August, section 4.4, <http://www.taxi-library.org/kang0898.htm>.

²⁶⁴ EIM Business & Policy Research 2002, op cit, Part 2: Country Reports, p. 107.

One of the clearest benefits from deregulation has been the diversification of service offerings, and increased innovation within the industry. Some taxi operations now offer mini-buses running scheduled route services, while others have been involved in transporting mail to New Zealand Post distribution centres²⁶⁵. A report to the Dutch government said of New Zealand's reforms that:

*Since 1989, the variety of taxi vehicles and services rose visibly. There are now taxi buses, all manner of group transport, tourist trips, pick-up services, for instance at airports, weddings, funerals, etc. Goods are also carried by taxi (permitted if small, irregular and of minor importance).*²⁶⁶

That is not to say that deregulation took place without any difficulties. One of the immediate challenges following reform emerged at airport taxi ranks. With taxi operators charging different fares, consumers had an incentive to seek out those taxi-cabs offering the cheapest hiring rates. This approach, however, slows down the process of matching passengers with taxis compared with the 'first in, first out' system that tends to operate at taxi ranks – a problem given the higher number of passengers as well as taxi-cabs waiting to serve them. Recognising this, airports in New Zealand have opted to restrict which companies can collect passengers from their taxi ranks. At Auckland Airport, permits to operate from the airport ranks are put up for tender every two years. The airport insists that taxis meet strict quality standards, and are required to pay a fee to enter the airport grounds²⁶⁷. While the hiring rates from the airport are not regulated, the estimated fare for a trip to the city centre is approximately NZ\$50 – 65²⁶⁸.

Beyond this, subsequent reforms to the industry have focussed on quality regulation, rather than any re-imposition of barriers to entry or fare controls. Surveys have revealed an increase in customer satisfaction as the market has stabilised in the deregulated environment²⁶⁹. The LTSA implemented revised safety and quality regulations in October 2007, including changes to local area knowledge requirements (strengthening these in metropolitan areas, while devolving responsibility for driver knowledge to ATOs in many provincial areas). In addition, drivers are now subject to more rigorous restrictions on working hours, with mandated rest breaks and rostered time off after long shifts, as a mechanism for combating fatigue²⁷⁰.

²⁶⁵ Kang, C-H 1998, op cit.

²⁶⁶ EIM Business & Policy Research 2002, op cit, Part 1, p. 42.

²⁶⁷ EIM Business & Policy Research 2002, op cit, Part 2, pp. 96-97.

²⁶⁸ Auckland Airport 2007, Transport – Buses, Shuttles & Taxis, <http://www.auckland-airport.co.nz/Guide/bus.php>, accessed 28 November 2007.

²⁶⁹ EIM Business & Policy Research 2002, op cit, Part 1, p. 42.

²⁷⁰ Details of the new regulations are available on the LTSA's homepage, <http://www.ltsa.govt.nz/commercial/law-changes-2007.html>, outlining the different requirements for various participants in the industry.

F.3 Deregulation in the Netherlands

Europe contains a mix of different approaches to taxi regulation. London is famed for its black cabs, but the UK also has a vibrant hire car sector – so-called “minicabs” – as a result of deregulation. Sweden, like New Zealand, deregulated its industry across the country at once, and has seen industry profitability increase²⁷¹. Yet elsewhere, including in France and Germany, strict economic regulation of both entry and fares remains.

The Netherlands has historically adopted a highly liberal approach to economic policy. Nevertheless, like most countries, it too had adopted a stringent regulatory approach to the taxi industry. Having observed the effects of deregulation in other jurisdictions in Europe, the Netherlands proceeded with a degree of caution in their reforms, the first stage of which was implemented in 2000. The Dutch government felt it appropriate to proceed in a number of stages, reducing economic constraints on the industry while re-regulating with respect to quality and safety controls. Furthermore, on-going monitoring of the industry was a key feature of the government’s policy, allowing it to assess whether deregulation was meeting its goals. (The primary objective of deregulation was to improve the role of taxis within the broader transport sector, in particular seeking to increase the consumer mode share of taxis²⁷²).

In terms of the policy, the Dutch government had to centralise legislative and regulatory power with the national Ministry of Transport, Public Works and Water Management (*Ministerie van Verkeer en Waterstaat*). Previously taxi regulations had been handled by local authorities. Under the new regime, barriers to entry were initially reduced, with the gradual release of new licences (issued against a quota), followed by entire deregulation in 2002. The initial goal included total deregulation of fares as well, with the use of a maximum fare only intended as a transitional stage. However, the government has since retained use of the maximum fare.

The maximum fare was intended to be a safeguard for consumers in the short run, being set well above what was expected would be the standard fare. While the average rate paid by passengers is lower than the maximum, fares have increased in real terms²⁷³. As observed by Bakker, “the maximum tariff worked out more as a guide for setting the pace for tariff increases rather than functioning as a ceiling”²⁷⁴. Insofar as this is true, deregulation appears to have created what the government had intended to prevent – significant price increases. As has been observed in other jurisdictions, maximum fares have not encouraged price competition in the Netherlands. Instead a transitional measure has seemingly become entrenched as a permanent part of the system.

²⁷¹ EIM Business & Policy Research 2002, op cit, Part 1, p. 33.

²⁷² Bakker, P. 2005, *Deregulation of the Taxi Industry: Experiences in the Netherlands*, Rotterdam, February, presented at the OECD/ECMT Transport Research Centre round table 2007, ‘(De)regulation of the Taxi Industry’, Paris, March, p. 79.

²⁷³ Id. at p. 78.

²⁷⁴ Ibid.

Another problem in the Dutch situation has been observed at taxi ranks. In particular, the practice of 'first in, first out' seems to have continued despite deregulation. Without any competitive impetus, there has been little reason for the operation of ranks to change. In addition to this, many local councils (who are responsible for the provision of the public taxi ranks) have not made any changes to the layout or structure of the ranks²⁷⁵. This has limited the ability for consumers to make a choice as to which operator they might prefer to travel with, even though the law now stipulates that they can choose whichever taxi they like when attending a rank.

Despite these problems:

*Returning to policy before deregulation is not an option. There were good reasons to want things to be different: the consumer was not favoured by the government-imposed artificial scarcity, while the advantages from that were not passed on to all drivers, but one-sidedly to only the few private individuals that leased out the licences in combination with taxi dispatch-centre affiliation.*²⁷⁶

While greater competition has not been resulted in lower prices, and to this end not all desired outcomes have been achieved, it should also be noted that entry deregulation has not brought about any reduction in service quality. Indeed, measured against pre-deregulation surveys, customer satisfaction levels have risen²⁷⁷. The Netherlands has strengthened its quality regulations, and continues to monitor these. In particular, there are certification requirements for drivers as well as operators, while vehicle standards are designed to promote comfort and safety. Given the declining number of violations reported to the industry regulator, it would appear that the quality regulations in place are broadly effective²⁷⁸.

²⁷⁵ EIM Business & Policy Research 2002, op cit, Part 2, p. 86.

²⁷⁶ Bakker, P. 2005, op cit, p. 82.

²⁷⁷ EIM Business & Policy Research 2002, op cit, Part 1, p. 26.

²⁷⁸ Bakker, P. 2005, op cit, p. 78.