A REGULATORY FRAMEWORK IN CONSUMERS’ INTERESTS

On-demand transport reforms in WA: a report for Uber

3 November 2016
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EXECUTIVE SUMMARY

The recent emergence of ridesharing platforms has brought into question the effectiveness of current approaches to regulating the taxi and hire car industry, previously the only forms of point-to-point transport in Western Australia (WA).

The challenge for Government should be simple; develop a regulatory framework that protects the public and ensures consumer protection and customer safety, while allowing someone to share a ride in their own personal car, without burdensome barriers to entry and costly regulation.

In common with other jurisdictions around Australia, the WA Government is presently formulating and implementing policies about how to best regulate ‘on demand’ transport in the light of these new and emerging business models.

On-demand transport is defined as follows:

> On-demand transport is a user-oriented form of transport characterised by flexible routing and ad-hoc scheduling of small/medium vehicles operating between pick-up and drop-off locations according to the passenger’s wishes...[that is] provided by the private sector....

Frontier Economics has been asked by Uber to provide an independent report examining the likely consequences of WA’s proposed regulations relating to on-demand transport. The report focuses on whether the proposed approach imposes only those burdens that can be genuinely justified as necessary and proportionate to the identified problems, and how the WA regulations are likely to affect the supply of drivers of on-demand services.

A fit for purpose model

The Government’s reform process provides a real opportunity to lay the foundations for a re-invigorated on-demand transport sector. Previous regulatory arrangements (including limits on supply and high fixed licensing fees) have been costly for consumers as they prevent the development of new or innovative services. Moves to liberalise vehicle licensing are highly encouraging in that they could:

- dramatically improve the ability of passengers to take journeys that would otherwise not be made
- facilitate new kinds of service models which place competitive pressure on existing providers to raise standards.

However, in doing so, it is important that the new regulatory model is ‘fit for purpose’. It should provide the appropriate protections for consumers while imposing minimum burdens.

Regulation should focus on ensuring public safety and confidence in on-demand transportation services

There is a clear rationale for the Government to regulate driver and vehicle safety in the sector in order to protect consumers and maintain public confidence in the safety of the industry. It is also reasonable for the Government to seek to recover the administrative costs of appropriate regulations, so long as these costs are efficient.

However, the costs of rideshare driver licensing in WA appear excessive and out of proportion to the costs necessary to ensure an adequate level of safety. The upfront costs to rideshare drivers in WA as outlined are more than three times those in NSW.\footnote{See footnotes 15 and 16.}

WA’s regulations appear excessive and out of proportion

The government’s proposed regulatory approach is not the most efficient way of achieving its goals. Imposing fixed upfront costs on rideshare drivers is likely to significantly limit the number of vehicles and drivers that will supply services.

The Government should urgently revisit the requirements and costs that are to be imposed on drivers to ensure that they are (a) proportionate and necessary and (b) efficiently-incurred.

The success of ridesharing platforms relies on tapping into underutilised resources – private vehicles and drivers with time to spare. Many rideshare drivers only drive for a small number of hours per week, or in between other full-time employment. For these drivers, high, fixed upfront costs will significantly deter them from providing these services. This will eliminate much of the benefit that new on-demand transport options will offer; that is, it will continue to contribute to an under-supply of vehicles at peak times and constrain growth in the market.
When surveyed, 79 per cent of Uber’s partner drivers said that a $500 upfront licence fee would prevent them from driving. This would mean around 4,000 Western Australians would lose the opportunity to earn an income through ridesharing, and markedly reduce the ability of ridesharing to address gaps in demand.

Accreditation of ridesharing platforms is a more effective approach to regulation

A simpler and more coherent regulatory approach would be to cast aside the traditional vehicle licencing model, and replace it with a model which puts responsibility for safety on the people or organisations providing the services. A model focusing on accrediting ridesharing platforms or providers rather than regulating vehicles and drivers would achieve the same regulatory goals in a more efficient way. This would involve the platform satisfying the WA regulator that their systems ensure that driver and vehicles safety standards will be upheld. This approach is not novel – the WA Government already uses accreditation for regulating heavy vehicles operators’ approaches to vehicle maintenance, driver safety and fitness for work.

Under an accreditation approach, the costs of accrediting the platform could be collected through cost-based fees imposed on the platform rather than vehicles/drivers.

A consumer levy would undermine the benefits of on-demand transport reform

Enforcement of current driver and vehicle licensing policies will significantly reduce the lower prices, greater vehicle availability and better quality services that are currently being enjoyed by WA consumers. A second source of concern is recent debate around the use of consumer levies to fund losses said to be incurred by owners of perpetual taxi licences. While we do not comment on the merits of compensation, imposition of levies on top of high driver costs will create further significant barriers to the development of a vibrant on-demand sector.

The primary problem with a consumer levy, which is well known in the literature on efficient taxes, is that a levy only on on-demand transport will be too narrowly targeted. Narrowly targeted taxes tend to be the worst kinds of taxes because they distort consumers’ choices – in this case, the most obvious substitute to which consumer demand will shift is the use of private cars.

As well as this primary problem, further detriment is likely as the compliance costs associated with a new levy are likely to be high. There are no obvious means by which the Government can collect this levy from drivers that predominantly accept cash payments. Finally, a consumer levy will result in

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3 WA Uber Driver/Partner survey results
market contraction, threatening the achievement of broader benefits from
greater availability of rideshare vehicles.

Our view is that the Government would need to demonstrate that the imposition
of a levy can pass a rigorous cost-benefit test before further implementation is
considered.

Consumer levies are particularly damaging to on-demand transport as new
and innovative services tend to be lower-priced and critically dependent on
maximising market size.

Recommendations

We recommend that the WA Government consider:

- a ‘fit for purpose’ regulatory approach that recognises the differences
  between taxis and ridesharing
- introducing an accreditation scheme that places responsibility for driver and
  vehicle safety on the ridesharing platform
- removing vehicle licensing fees entirely, and reviewing the efficacy of other
  proposed driver fees
- funding any compensation for taxi licence holders from broader funding
  sources rather than a levy on on-demand transport users.
1 ON DEMAND TRANSPORT IN WESTERN AUSTRALIA

On-demand transport services, as defined by the Department of Transport, are as follows:

…a user-oriented form of transport characterised by flexible routing and ad-hoc scheduling of small/medium vehicles operating between pick-up and drop-off locations according to the passenger’s wishes…[that is] provided by the private sector….4

The reference to ‘on demand’ transport reflects that this sector is now much broader than the old world context which sought to segment – and ultimately protect – taxis as the primary means of delivering point-to-point transport in Western Australia. This definition includes private shuttle services, private taxis and small charter services and ridesharing services.

1.1 Reform principles

In common with other jurisdictions around Australia, the Western Australian Government is presently formulating and implementing policies about how to best regulate ‘on demand’ transport in the light of new and emerging business models.

The WA government notes reforms are necessary to address the “unprecedented changes in the market which have flowed from the introduction of app-based technology and (its) rapid take-up by consumers.”5

The key principles behind the reform concepts outlined in the Department of Transport’s Green Paper (2015) included that:

- The industry should be free to innovate in a safe and secure manner to provide the transport services consumers want.
- The on-demand transport industry should be safe and accountable. And the regulatory environment should be focussed on ensuring this.
- There should be a level playing field for all providers of on-demand transport (see section 3.1).

1.2 The proposed reforms

Following release of the Green Paper, on-demand transport in Western Australia is being transformed through the introduction of significant regulatory changes to the industry. This will occur over two stages.

Stage one of the reforms involved interim initiatives to reduce regulatory burden including:

- on-demand transport licence fees based on a cost-recovery based model

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4 General Paper, p. 12.
A REGULATORY FRAMEWORK IN CONSUMERS’ INTERESTS

- the introduction of a new on-demand transport licence category
- red tape reductions
- a compensation package for Perth metropolitan taxi plate owners.

The Department of Transport has estimated that the cost to enter the industry, under the new framework, for a rideshare driver, will be $1,102.30\(^6\).

This cost is said to include the application fee, the cost associated with a commercial medical assessment, national police clearance, traffic infringements and convictions record, additional Compulsory 3rd Party Insurance, light vehicle inspection fee and an annual licence fee for Charter Vehicles and Regular Passenger Transport.

The Department further states that “omnibus licence holders also pay an annual licence fee which will be $272 in 2016/17 per vehicle.”\(^7\) This fee structure is said to have been developed to “transition to a cost recovery basis.”\(^8\)

**Stage two** will see a simplified annual licensing framework come into effect under the proposed *On-demand Transport Act*.

The Stage two reforms will also aim to:

- ensure a chain of accountability across entities that deliver on-demand transport services
- define the role of the regulator
- provide appropriate tools and penalties that will ensure on-demand transport industry participants who are non-compliant are held accountable.

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\(^6\) See footnote 5. This figure is understood to include the cost associated with obtaining an F or T Extension on a WA Driver’s licence which authorises the driver to operate and take fare paying passengers in a vehicle other than a taxi.

\(^7\) Ibid.

\(^8\) Ibid.
2 REALISING THE POTENTIAL OF ON-DEMAND TRANSPORT

2.1 Past regulatory approaches have left significant service gaps

It is well known that demand for on-demand transport services fluctuate significantly across the week. The majority of trips occur:

- on Friday and Saturday nights
- at the start and end of the work day.

There is also diverse demand from patrons that are reliant on taxis/on-demand services due to lack of access to a private vehicle or their inability to drive (i.e. due to disability).

Like other Australian jurisdictions, WA’s existing taxi licensing regulations have limited vehicle numbers (by controlling the number of taxi plates in circulation via quantitative or price-based restrictions). The limitations on numbers have created licence scarcity and allowed a material value to attach to the right to operate licences. The high licensing fixed cost limits the overall number of vehicles and drivers that can profitably drive, and means it is harder to increase supply at certain high demand times. The most efficient operating model with these regulations has been to keep vehicles on the road all the time, and has resulted in the supply of vehicles better matching average demand rather than fluctuating to meet peak demand. Combined with relatively demand-insensitive fares and restrictions on taxi-like substitutes, there is likely to be significant unmet demand.

In contrast, if the fixed costs of operating were lower, fixed costs could be recovered from driving only a small number of peak hours. This would have the dual benefit of getting more vehicles on the road at a time when the demand for vehicles is highest, and also means that fewer vehicles will be on the road in lower demand periods. Ultimately, by increasing the flexibility of the available vehicle fleet, it would also reduce the need for fares to vary widely to ration demand at peak times.

2.2 New technologies are allowing ridesharing services to improve quality and fill market gaps

Using technology, ridesharing platforms are able to facilitate real time, direct bookings with low search costs. Ridesharing platforms such as Uber also provide reputational reporting mechanisms to signal driver and vehicle quality to patrons. Together, these developments are enabling under-utilised private cars to be used to provide on-demand transport service that are particularly suited to meeting
peaks in demand and filling other service gaps which have been left by traditional the taxi and omnibus service models.\footnote{The omnibus or charter service model has historically been restricted with competing with taxis by imposing \phr{luxury} and minimum fare requirements which limit the ability to service peak demand and other service gaps.}

The most obvious example of the gaps that rideshare can fill is servicing demand at its greatest – peak periods. Rideshare vehicles appear most active over the weekend peak (see Exhibit 1). Around 55 per cent of reported taxi trips in Perth occur over the Friday-Sunday period\footnote{in the 2009-2013 period Department of Transport, Taxi user survey 2013 statistics (source: \url{http://www.transport.wa.gov.au/mediaFiles/taxis/taxis_user_survey_2013_stats.pdf}} while for ridesharing this is above 65 per cent.

\begin{exhibit}
\textbf{Exhibit 1.} Uber trips per hour
\begin{figure}
\centering
\includegraphics[width=\textwidth]{uber_trips_per_hour}
\caption{Uber trips per hour in Perth}
\end{figure}
\end{exhibit}

Importantly, rather than acting as a substitute for taxi services, rideshare services appears to be meeting previously unmet demand. In other words, they are generating new trips and delivering \phr{market expansion} rather than substituting for existing taxi trips.\footnote{See Frontier Economics bulletin \textit{Levelling up} which further discusses this topic.}

In a previous study for Uber, Deloitte Access Economics estimated that ridesharing was growing the point-to-point transport market in Australia, with 61\% of uberX rides new to the point-to-point transport market.\footnote{Deloitte Access Economics, \textit{Economic effects of ridesharing in Australia}, 2016, p.3.}

A further advantage of new technology is that it enables a much more precise locational and temporal matching of demand with supply. This is achieved through the flexibility of fares, which are much more responsive than traditional taxi fares set through regulatory processes and which can only ever offer a \phr{broad brush} approach to complex problems of peak and off-peak pricing.\footnote{The Victorian taxi fare regulator, the Essential Services Commission, recently concluded that it could not readily introduce greater flexibility into peak taxi fares due to an absence of industry support and tangible examples of how service providers might use the additional flexibility. See Essential Services Commission 2016, \textit{Taxi Fare Review 2016 Final Report}, June 2016.}

\subsection{2.2.1 The future market for on-demand transport}

While WA has already started to see the benefits of technological change in on-demand transport, it could be on the cusp of a shift towards a broader use of on-demand services. Ridesharing and related services (such as algorithmically-determined or fixed route services) rely on capturing large \phr{economies of density} to be successful. Economies of density are similar to economies of scale, but rather than describing how costs change as network size increases, economies of density
instead describes how costs behave as more drivers and users are added to a given network coverage area. Economies of density exist if average costs decline as more drivers and users are added to a network. Because a denser network reduces distances travelled without passengers, and allows for greater route sharing, on-demand transport markets are characterised by economies of density. Practically, this means that these kinds of markets work better and are therefore used more where lots of vehicles are available.

To date, the market for ridesharing has been limited by the prevalence of car ownership. However, small changes in availability and reliability of on-demand services increase the feasibility of longer-term switching away from private cars. This is not just an aspiration; a useful example of how these services are already emerging within suitable regulatory models is uberPOOL, described below.

Exhibit 2. uberPOOL

uberPOOL allows users to share a ride with another patron and split the cost of the trip when headed in the same direction. Patrons book their trip as normal, but if they select uberPOOL the platform will match patrons travelling along a similar route.

This arrangement adds some time to the trip (on average less than 5 minutes) but reduces the cost for patrons. Lower costs can improve access to affordable transit for people in underserved areas where existing public transport infrastructure is poor. Further, it generates additional benefits for the wider public, by reducing ride duplication, congestion and greenhouse gas emissions.

uberPOOL is an established model that is delivering benefits right now. In Los Angeles, riders chose uberPOOL to take more than 5 million trips in the first eight months. In San Francisco, approximately 40% of all Uber trips are POOL trips.

Source: Uber
Note: Image shown is an example of the choice given to the consumers where uberPOOL services are available.

The WA government must give careful consideration to how it designs its regulatory regime in the future to ensure it is making the most of ride-sharing by maximising the potential for ‘market expansion’ effects and the creation of economic value. This is discussed in the following section.
3 ENSURING THAT THE WA REFORMS MAXIMISE VALUE FOR CONSUMERS

There are two critical elements to ensuring that the WA regulatory reforms make the most of innovations such as ride-sharing:

- the rationale for regulation (i.e. the problem or problems the Government is trying to solve) must be clearly articulated
- efficient and effective regulations should be targeted at this problem or problems.

Aspects of WA’s proposed reforms are lacking in relation to these two elements. Below, we discuss how other policy options could achieve the WA government’s objectives far more efficiently.

3.1 The rationale for regulation

Targeting market failure

The principles for regulatory reform outlined in the Department’s Green Paper are mostly appropriate. However, the use of the term ‘level playing field’ can be easily misconstrued.

In particular, it should not be taken to mean all forms of on-demand transport should be subjected to the same standard form of regulation.

Regulations, above all, should be proportionate to the problem identified and focused on achieving the objective – namely, that all forms of on-demand transport services are providing the services consumers want and are doing so in an efficient, safe and accountable manner.

The Australian Government’s Guide to regulation includes the principle that:

> Regulation should be imposed only when it can be shown to offer an overall net benefit.14

Regulation provides the most benefit when it is targeted at, and designed to solve a particular problem or market failure.

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Relevant market failures

In the context of the on-demand transport market, the key rationale for regulation derives from information asymmetry. More particularly, when choosing whether to use a service, prospective passengers usually have significantly less information than the provider on the safety and quality of the journey offered.

This information asymmetry has lack of trust between provider and client as a natural consequence, which will reduce the number and value of market transactions (trips), unless there is some way in which service providers can signal their quality and safety to passengers.

Certainly, the problem of trust and quality exists in the rank and hail taxi market. Here consumers are essentially forced to take the first of a number of (often) identically-marked taxis. There are no effective means of signalling quality in these situations and little means to exercise choice even if there were means. It's also hard to assess what is a reasonable fare – particularly if is the passenger if unfamiliar with the journey to be taken. In most jurisdictions, regulation mitigates these problems; by vetting drivers and vehicles so they are safe and meet minimum quality standards, and by setting reasonable fares.

For ridesharing platforms, reasonable fares and quality can be established through market mechanisms. This is because platforms/apps have been developed solve the trust problems from the ground up. Users book vehicles with knowledge of their current location and reputation (i.e. the past quality rating of the driver/vehicle). Information flow to the consumer is better, which acts as a control on quality and price:

- fares can be estimated on users’ smartphones with visual feedback on the route taken
- poor performance can be punished through immediate feedback on drivers and vehicles.

A role for safety regulation

But what about driver and vehicle safety? Both taxi operators and ridesharing platforms have incentives to keep passengers and drivers safe. Obviously, a reputation for unsafe operation damages business! However, loss of reputation is not the only factor in play in regard to safety. First, the private incentives of drivers alone may lead to under-provision of vehicle roadworthiness for several reasons. Drivers are unlikely to bear the full economic cost of a crash or breakdown caused by operating a poorly maintained vehicle. Drivers may lack the necessary skills and judgement required to assess what is safe regarding vehicle maintenance, and to gauge the potential impact of poor servicing. They may have less information on the causes or consequences of roadworthiness.

When faced with poor safety performance from one taxi or ride-sharing platform, consumers may attribute this to all operators. Unsafe operation could lead to a lack of confidence and subsequent decline in demand for all on-demand services.
The WA government’s interest in ensuring confidence in on-demand transportation services are in-line with the interests of providers, including ridesharing providers. Both parties have a common interest in ensuring the general quality and safety of the vehicle and service provided. These common interests include:

- that vehicles are properly insured, maintained and roadworthy
- that drivers have the authority to drive and have been subject to appropriate background checks
- drivers and passengers do not present a risk to each other
- fees and charges to passengers are transparent.

This implies that government regulation should be focussed on ensuring operators and ridesharing platforms are doing everything they reasonably can to manage these safety risks. However, there are policy options around how this is best achieved, which have not been explored to date. We look at these below.

### 3.2 What do appropriate regulations look like?

Both government and ride-sharing platforms share certain interests. Managing quality, safety and driver compliance is important to all parties. However, our view is that the government’s proposed regulatory approach does not address this in the most efficient manner. For reasons we will explain, the current approach places the benefits from ride-sharing platforms at risk.

#### 3.2.1 Accreditation of ridesharing platforms would efficiently address the objectives

In hindsight, the historic regulatory model that licensed vehicles as well as drivers involved unnecessary duplication and redundancy. It is important that these mistakes of the past are not repeated. A better approach would eliminate vehicle licensing and focus responsibility for vehicle safety on drivers and network or platform operators.

For example, an accreditation framework could involve the platform satisfying the new WA regulator that their systems can meet the regulator’s requirements in respect to driver and vehicle safety. The administrative burden of vetting drivers and vehicles against those standards is devolved to platform operators. The regulator would accredit platforms to perform that function and will regularly audit platforms to ensure compliance.

A high level schematic of an appropriate model is shown in Exhibit 3.
Exhibit 3. A ridesharing compliance model

<table>
<thead>
<tr>
<th>LEGISLATION</th>
<th>Establishes safety regulator</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGULATIONS</td>
<td>Establish driver qualification criteria and safety standards</td>
</tr>
<tr>
<td>REGULATOR</td>
<td>Accredits and regularly audits platforms</td>
</tr>
<tr>
<td>PLATFORMS</td>
<td>Assess drivers against qualification criteria</td>
</tr>
<tr>
<td>DRIVERS</td>
<td>Comply with safety standards</td>
</tr>
</tbody>
</table>

Under an accreditation approach, the costs for the regulator of accrediting the platform could be collected through cost-based fees imposed on the ridesharing provider or platform rather than on drivers.

Such a compliance approach is not novel. The WA government already has in place a mandatory accreditation regime for regulating commercial heavy vehicles operators’ approaches to vehicle maintenance, driver safety and fitness for work. Under this scheme, heavy vehicle operators can have their maintenance and safety system accredited by Main Roads for a three-year period for an administration fee of $225 and the cost of an independent certified audit of their relevant management systems upon entry to the scheme. This is further discussed in the Box below.
WHAT COULD IT LOOK LIKE?
THE WESTERN AUSTRALIA HEAVY VEHICLE ACCREDITATION SCHEME

In Western Australia, individuals or companies are required to become accredited to gain a permit or order from Main Roads to operate commercial heavy vehicles. The WA Heavy Vehicle Accreditation Scheme (WAHVA) enables heavy vehicle operators to demonstrate, through audits of their management systems and records, that their vehicles and drivers comply with regulatory standards.

WAHVA involves two compulsory modules - Fatigue Management and Vehicle Maintenance. The aim of these modules is to ensure vehicles are safe and reliable and the drivers are fit to drive.

Accreditation guidelines have been produced to assist operators in developing appropriate management systems and policies for fatigue and maintenance. Operators are also required to maintain sufficient operating records to demonstrate the workings of these systems and procedures.

To become accredited, operators must pass an Entry Audit conducted by a certified auditor. To maintain accreditation, operators must be audited annually to ensure compliance. A range of documents and records relating to vehicle roadworthiness, driver training and education, fatigue management plans and so forth must be maintained to retain accreditation.

Similar arrangements exist in other jurisdictions under the National Heavy Vehicle Accreditation Scheme managed by the National Heavy Vehicle Regulator.

Source: Main Roads Western Australia

3.2.2 If the current model is pursued, driver compliance costs must be reduced

It is reasonable for the Government to seek to recover the administrative costs of regulation of the sector. Economic efficiency is promoted if costs are borne by those who cause the costs to be incurred, and, if the costs are partly or fully passed through to consumers, if the beneficiaries of the regulation bear some or all of the cost.

However, a pre-requisite for the application of this principle is the regulations must be justified, in the sense that they deliver benefits which exceed costs. It can be costly to administer regulations that are inappropriate. For example, a regulation that prohibited drivers with brown shoes because drivers in brown shoes have more accidents would be very costly to enforce while contributing little to driver safety outcomes.

A comparative review of the costs of licensing ridesharing drivers in Australian states and territories suggests that costs in WA are excessive and out of proportion compared to some states. The upfront cost to drivers appears to be more than 3 times the cost in NSW.\(^\text{15}\)

\(^{15}\) In NSW, the total estimated cost of obtaining driver accreditation, undergoing a policy check and a vehicle inspection is estimated to be between $81 and $121. An additional amount is payable if a vehicle is
This may, in part, be due to the duplication of new and existing fees, or excessive fees. In particular:

- The WA Government requires an additional omnibus (rideshare) licence and $272 fee for any vehicles used for ridesharing purposes. It is unclear what this fee is recovering and what the benefits of the omnibus licence are. The costs associated with drivers obtaining a criminal history check, driving history check and vehicle inspection are recovered through a separate charge.

- The proposed fee appears to include compulsory third party insurance even though all private vehicles must have this already. Further, there appears to be no further analysis of whether and how drivers of rideshare vehicles create additional costs for third party insurers. There is a lack of regulatory transparency that the WA Government needs to address.

- A person with a driver’s licence has already been deemed medically fit by the State to drive on the roads and carry passengers. Medical checks are likely to be unnecessary for those drivers in good health, and are not targeted at those likely to be a higher risk (e.g. driver age, previous medical issues) which could be picked up in a self-assessment.

- Vehicle inspection costs are higher than those in other states – perhaps reflecting the need to use a small number of licenced vehicle inspectors in WA and a significant portion of inspection costs are retained by the Department of Transport in administration fees.

We consider the WA Government should revisit the requirements and costs that it is intending to impose on ridesharing drivers to ensure they are necessary, not duplicative and do not needlessly stifle the development of on-demand services.

We now turn to the likely impacts of the proposed approach on drivers.

### 3.3 Why the current regulations needlessly stifle on-demand services

As highlighted in section 2, WA has already forgone significant economic benefits by imposing high fixed costs on taxi operations that are likely to have led to under-supply at peak times and in other locations. Our analysis of the government’s
proposed regulatory reforms suggests that the proposed reforms risk jeopardising the value that can be achieved from the introduction of new ride sharing services.

The proposed reforms include charging ridesharing drivers a fixed licence fee which is levied on a per vehicle basis. While significantly lower that a metropolitan taxi licence, this fee is significant to cohorts of ridesharing drivers who will be discouraged from entering the market to fill gaps in the existing service.

Ridesharing platforms tap into a significant underutilised resource – private vehicles and drivers with time to spare. Many rideshare drivers only drive for a small number of hours per week or in between other employment. For these potential drivers, fixed upfront costs are likely to deter them from offering these services.

Uber has reported that half of its driver-partners drive for on average less than ten hours per week, with many driving for one or two hours. This is not surprising, as the majority of Uber driver-partners use Uber to supplement their income by working flexibly around other commitments. This category makes up the drivers who are likely to be active during the peaks in demand.

A recent survey of Uber driver partners also found that 68% of drivers were “in between” full-time employment, in part-time or casual employment, or self-employed. Given these drivers also envisage they will only be involved in the market for a limited period of time, a fixed upfront licence fee, coupled with extensive waiting times, will likely to discourage them from entering the market and is not economically justified.

Illustrating the potential impact

A simple series of examples can show why these cohorts of drivers might be discouraged from participating in the market. If we assume average hourly take home earnings of a rideshare driver is in the order of $20 per hour and regulations impose yearly fees of more than $1,000 then:

- An individual that drives for 10 hours per week for a full year would expect to earn around $9,600. For this individual, fees would exceed 10% of their total expected earnings for the year. If that individual only drove for three months, the fees would be more than 40% of actual earnings.
- For an individual that drives only 2 hours per week the fees would exceed 50% of their expected total earnings.
- For an individual that uses Uber as a “stop gap” between other full time employment, the impact is similar. Suppose we assume a driver drives for 38 hours per week but only expects to drive for 4-8 weeks while they are looking for further employment. Fixed fees would account for between 18-36% of expected earnings.

17 Uber submission to the Opportunities for Personalised Transport Review (Queensland), June 2016, p.18
18 ABS Average hourly cash earnings for Automobile, bus and rail drivers ($28.5ph) from Employee Earnings and Hours, Australia, May 2014, inflated using ABS quarterly wage inflation index for private businesses, less assumed tax and variable operation costs of around 30%. Assumption does not include data of rideshare driver earnings in Perth.
19 Assuming they work for 48 weeks per year
These figures are summarised in Exhibit 4.

**Exhibit 4. Illustrating the problem with high fixed compliance costs**

Furthermore, given the uncertainty around their future earnings, the *upfront* nature of these fees will further discourage drivers from entering the market in the first place.

- An increase in upfront fixed costs, of the order proposed, will effectively reduce the expected average hourly earnings of many potential drivers to a point where they may choose not to enter, or to drop out. This view is supported by recent driver surveys. When surveyed, 79 per cent of applicant partners said that a $500 upfront licence fee would prevent them from driving. \(^{20}\)

- If this is accurate, given Uber has 5,000 driver partners in WA, a licence fee of this size could result in 4,000 Western Australians losing the opportunity to earn and income through ridesharing.

- Not only do the proposed omnibus licence fees risk shrinking the size of the services provided by ride sharing platforms, but they may limit the emergence of other forms of innovative services, such as trip pooling, which has already shown significant potential in other cities to lower costs and further expand the market for on-demand services (see Exhibit 2. uberPOOL).

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\(^{20}\) WA Uber Survey results.
4 THE ROLE OF CONSUMER LEVIES

4.1 Paying for reforms

The government’s first stage of the on-demand transport reforms includes provisions for compensation of taxi licence owners. We understand that the proposed compensation reflects that the government’s policy objectives from this reform are broader than strict economic efficiency, as implementing such criteria would indicate that the case for compensation is weak.\(^{21}\)

While we express no particular view on the merits of compensation, we do believe that the means by which compensation or other transitional assistance are to be funded are critical to the benefits of reform.

4.2 Using consumer levies to fund reform will markedly reduce or eliminate consumer benefits

The reason that the means of funding are critical to overall reform benefits is because different funding options impose different costs. There are two sources of cost associated with raising funds:

- The direct compliance costs to government and business of collecting the funds.
- Costs from distorting decisions (sometimes called the “excess burden” of taxation).

4.2.1 The direct costs will be high, or compliance poor

There appear to be no low-cost means to collect a ‘per trip’ tax or levy for on-demand transport services. This particularly applies to cash transactions which still predominate in the taxi market. Presumably, the Government will have to invest in some form of collection infrastructure to ensure compliance with the levy. Therefore, compliance with levy collection is likely to be either very costly to enforce, or very poor.

Further, we note that levying the tax on large numbers of small businesses is likely to be regressive. This is because compliance costs are not proportional to size of business, and the ‘fixed cost’ nature of many tax compliance costs have been well established by reliable studies in various countries.\(^{22}\)

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\(^{21}\) See ERA, Inquiry into Microeconomic Reform in Western Australia, June 2014, p. 18.

4.2.2 The costs of distortions

In the economic literature, the case is well established that best taxes or sources of funding are those that:

a. can be collected at low costs and
b. do not distort decisions, or minimise such distortions.

As an example, a tax levied on land is often seen as an ideal tax because such a tax can be collected at relatively low cost (and cannot readily be avoided), and because there are few good substitutes for land.23

On the other hand, ‘narrow’ taxes on transactions are commonly seen as the worst kind of taxes.24 Distortions are worse where taxes are levied on a service which has close substitutes that are not subject to the obligation (a ‘narrow’ tax).

A tax on a particular service such as ‘on demand’ transport qualifies as a narrow tax that will cause behavioural distortions. Australian studies have shown, for example, that private cars are the closest substitute for on demand transport.25

This is shown in the following Exhibit, using estimates for Victoria, and suggests that around 60 per cent of trips diverted from taxis due to the increases in taxi fares would be taken in a private car.

**Exhibit 5. Consumer substitution response to an increase in taxi fares**

![Consumer substitution response to an increase in taxi fares](image)

Source: Hensher for the Victorian Taxi Industry Inquiry, 2012

This means that consumers will respond to higher prices by switching their demand to services which deliver less economic value to them – the difference between value and price – but which are made relatively cheaper by virtue of the levy. Consumer switching to the use of private cars seems an undesirable and unintended consequence of a consumer levy on on-demand transport.

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24 ibid.

Distortions of the form described are usually quantitatively estimated by economists by use of demand curves and estimating the “deadweight loss” triangle caused by the higher price (see Exhibit 6). However, for transport services, such estimates underestimate the impact of levies on consumers. This is because if levies reduce market size and the number of available vehicles, it will increase the effective or ‘full’ price to consumers (the dollar price plus the implied waiting time price). If levies reduce the numbers of vehicles on the road, these benefits will be lost and the ‘costs’ of the levy will be greater.

In Exhibit 6, we illustrate the difference between a normal or standard market setting where a tax or levy is imposed, and the additional costs caused in markets such as that for on-demand transport. The cost here is shown as higher implicit or ‘full’ price which includes the cost from longer average waiting times for vehicles.

Exhibit 6 The impact of a levy in the on-demand transport market, comparison to a standard market

Source: Frontier Economics

Below, using some reasonable assumptions, we illustrate that the efficiency losses from levies on on-demand transport are likely to be significant.

QUANTIFYING EFFICIENCY LOSSES FROM A CONSUMER LEVY

Taxes levied on narrow revenue bases are liable to cause losses in economic efficiency, called deadweight losses or excess burdens. We can estimate the size of such losses from using a levy. While this exercise is largely illustrative, it demonstrates that the costs of a narrow levy are non-trivial and get substantially worse as the implied tax rate increases (there is a well-known result in public finance economics that the burdens associated with taxes increase by more than the increases in the tax rate<sup>26</sup>). Losses get even larger if we (appropriately) include losses attributable to longer waiting times.

We first assume that the levy would be passed through in prices. While this is not certain, as it depends on the form of the levy, it is reasonable to assume a per-trip

<sup>26</sup> See e.g. John Creedy, *The Excess Burden of Taxation and Why it (Approximately) Quadruples When the Tax Rate Doubles*, New Zealand Treasury Working Paper 03/29 December/2003
levy is fully passed through to consumers because it forms part of a service suppliers’ marginal cost.

The loss of welfare can then be measured by the deadweight loss triangle caused by higher price (which will be the pass through rate multiplied by a $2 levy27), and an estimate of the increase in waiting time caused by vehicle reduction28 (as per Exhibit 6). For simplicity of calculation we use a flat long run supply curve and linear demand.

The following table shows the potential deadweight loss depending on the pass through rate and the elasticity of demand. This is estimated using an average fare of $15 for around 20 million trips annually, based on existing estimates of the size of the taxi market and the impact of ride sharing on the number and average value of fares.29 (Ride sharing tends to be cheaper than taxis and does more short trips).

<table>
<thead>
<tr>
<th>ELASTICITY OF DEMAND</th>
<th>DEADWEIGHT LOSS ($)</th>
<th>DWL AS % OF REVENUE RAISED</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.5</td>
<td>5,353,624</td>
<td>15.2%</td>
</tr>
<tr>
<td>-0.75</td>
<td>5,702,489</td>
<td>16.6%</td>
</tr>
<tr>
<td>-1</td>
<td>6,051,354</td>
<td>18.1%</td>
</tr>
<tr>
<td>-1.25</td>
<td>6,400,220</td>
<td>19.7%</td>
</tr>
<tr>
<td>-1.5</td>
<td>6,749,085</td>
<td>21.4%</td>
</tr>
</tbody>
</table>

This illustrates while levies raise revenue, they can come at a significant cost – with around 20 cents in the dollar lost before even considering compliance and administration costs.

A final point is that the levy will have a disproportionate impact on services such as ride pooling. Carpooling trips, whereby multiple riders headed in the same direction are connected in the same vehicle, are significantly cheaper as the cost is shared. As a result, a levy (if applied to individual legs of a journey) will represent a far larger portion of trip total. If a carpool trip is roughly half the price of a normal point to point trip ($10), the price impact would be around 20 per cent of the fare and the substitution effects much more significant.

Our view is that the Government would need to demonstrate that the imposition of a levy can pass a rigorous cost-benefit test before further implementation is considered.

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27 A $2 levy has recently been floated in the media, as per: News.com.au, "WA Government considers $2 a trip taxi levy in compensation talks", October 2016, [http://tinyurl.com/jk5z2rx](http://tinyurl.com/jk5z2rx)

28 We assume that a 1 per cent fare increase would lead to a 1 per cent increase in vehicle waiting time, and a base waiting time of 5 minutes. Waiting time is valued at $30 per hour.

29 Around $30-35 million would be collected in levy revenue, assuming full compliance.
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