IPART
New South Wales

Independent Pricing and Regulatory Tribunal

Finding the best fare structure for Opal

Public transport fares in Sydney and surrounds

Transport — Issues Paper
July 2015

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Invitation for submissions

IPART invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by 28 August 2015.

We would prefer to receive them electronically via our online submission form <www.ipart.nsw.gov.au/Home/Consumer_Information/Lodge_a_submission>.

You can also send comments by mail to:

Review of public transport fares from 1 July 2016
Independent Pricing and Regulatory Tribunal
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Late submissions may not be accepted at the discretion of the Tribunal. Our normal practice is to make submissions publicly available on our website <www.ipart.nsw.gov.au> as soon as possible after the closing date for submissions. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed on the previous page.

We may choose not to publish a submission—for example, if it contains confidential or commercially sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please indicate this clearly at the time of making the submission. IPART will then make every effort to protect that information, but it could be disclosed under the *Government Information (Public Access) Act 2009* (NSW) or the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW), or where otherwise required by law.

If you would like further information on making a submission, IPART's submission policy is available on our website.

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1 Introduction

Over the past five years, public transport fares in greater Sydney have been standardised and simplified to create a more integrated network that is easier and more convenient for customers. For example, in 2010 the Government introduced new fare structures and paper tickets for individual modes of transport (MyBus, MyTrain and MyFerry) and travel across multiple modes (MyMulti). Between 2012 and 2014, it rolled out the Opal electronic ticketing system for all public transport modes in Sydney, Blue Mountains, Central Coast, Hunter, Illawarra and Southern Highlands.

During this period of change, IPART reviewed and determined maximum fares for bus, train and ferry services. However, we conducted our reviews for each mode separately under separate pieces of legislation – each with its own specific requirements about what we must consider and include in our determination.

Last year, the Government consolidated fare regulation for each mode of public transport in a single piece of legislation, the *Passenger Transport Act 2014*. In July 2015, we received a referral from the Minister for Transport and Infrastructure, asking us to determine maximum fares for all public passenger services on which the Opal smartcard is valid under the new Act. This referral gives us the opportunity to consider both the structure and level of fares for rail, bus, ferry and light rail services together for the first time.

1.1 What have we been asked to do?

We have been asked to review and determine the maximum fares to apply from July 2016 on public transport services on which the Opal card can be used. The review covers the following public transport services:

- train services operated by Sydney Trains and NSW TrainLink Intercity
- government and private bus services in Sydney, Newcastle, the Central Coast, Wollongong, the Blue Mountains and the Hunter regions
- ferry services operated by Sydney Ferries and the Stockton Ferry in Newcastle, and
- light rail services in Sydney.

In doing so, we must consider the legislative requirements set out in section 124(3) of the *Passenger Transport Act 2014* (see Box 1.1). These requirements are largely the same as those for our previous fare reviews.[1] In addition, we must consider the matters specified in the Minister's referral (Box 1.2). These include issues relating to the structure of fares, such as:

- whether there should be more integration of fares across the different modes of transport
- whether fare structures should be used to encourage more efficient delivery and use of the public transport network, and
- whether fare structures should be used to spread demand across different time periods.

While we have looked at some of these issues in previous reviews, the roll out of the Opal electronic ticketing system provides the opportunity for more significant changes to fare structure, including a range of fare options that were previously not practical under paper tickets.

One of these options is full integration of fares across all Opal services. The level of integration is one element of the fare structure. It relates to how the fare for a journey is calculated, including what happens if the journey involves more than one trip (eg, three separate bus trips) or more than one mode of transport (eg, a train and a ferry trip). Under the current distance-based fare structure, full fare integration would mean that fares vary by distance, but not by the number of trips or mode taken. For example, the fare for a 5 km train journey would be the same as for a 5 km bus, ferry or light rail journey, and the same as a 5 km journey comprising trips on different modes (eg, a 2 km bus ride and a 3 km train ride).

Full fare integration is attractive from a passenger's point of view, as it is very simple and easy to understand and could lead to lower fares for some passengers. However, like other potential changes in fare structure, it could also impose costs on other passengers and taxpayers. The Minister's referral essentially asks us to weigh up the benefits and costs of the potential fare structure changes and recommend the fare structure that best balances the matters we have been asked to consider.

[1] These reviews were conducted under the *Independent Pricing and Regulatory Tribunal Act 1992* and *Passenger Transport Act 1990*.

Box 1.1 Matters we are required to consider – Passenger Transport Act

IPART is to consider the following matters in making a determination or recommendation under this Part:

a) the cost of providing the services

b) the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers

c) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standards of service

d) the social impact of the determination or recommendation

e) the impact of the determination or recommendation on the use of the public passenger transport network and the need to increase the proportion of travel undertaken by sustainable modes such as public transport

f) standards of quality, reliability and safety of the services (whether those standards are specified by legislation, agreement or otherwise)

g) the effect of the determination or recommendation on the level of Government funding

h) any matter specified in the referral to IPART

i) any other matter IPART considers relevant.

Source: section 124(3) of the *Passenger Transport Act 2014*.

Box 1.2 Matters specified in the referral

1. The benefits of fare structures that support network integration to increase network efficiency and reduce overall costs.
2. The benefits and costs of spreading demand for public transport to increase efficiency in service delivery and the likely impact of different fares on the travel behaviour of customers, including whether current concession arrangements for peak and off-peak travel support the optimal use of the network.
3. Whether there are strong arguments for or against full integration of fares across all Opal Services, given that some modes have significantly different costs and/or externality benefits.
4. The relative contributions that customers and taxpayers should make to the cost of delivering Opal Services, including light rail as an Opal Service.
5. The technical feasibility of making changes to the current fare structure, given the features of the Opal system and the contracts in place for its implementation and operation.
6. The most appropriate method or methodology for determining maximum fares for Opal Services, including the need for sufficient flexibility to implement any changes to the current fare structure (where relevant).
7. Where relevant, transitional arrangements from the current fare structure to a new fare structure, assuming that new fares would apply from 1 July 2016 and including any customer impacts and technical limitations.
8. The need to ensure consistency between:
   a) the structure of fares in the final determination of appropriate maximum fares for Opal Services, and
   b) the NSW Government's announced policy position on the structure of fares for Opal Services.

1.2 How will we conduct this review?

For this review, we need to focus on two major areas:

1. **The best fare structure for Opal services,** and how existing fares should transition to this structure taking into account the impact on passengers and technological constraints.
2. **The maximum fare level for Opal services**, taking into account our views on how the costs of providing the services should be shared between passengers and taxpayers.

We will consult on each of these areas separately. This issues paper is the first step in our consultation process, and focuses mainly on the first area – **fare structure**. All interested parties are invited to make submissions in response to this paper by 28 August 2015.

We will release a separate discussion paper in September that focuses on the second area – **maximum fare levels** – and invite further submissions. In addition, we will hold a public hearing and workshop to provide a further opportunity for stakeholders to make comments on both areas of this review.

After we have consulted on and considered the fare structure and the fare level, we will release a draft report outlining our advice and recommendations on the fare structure, and our draft decisions on the maximum fare levels if this fare structure is adopted. We will also present the maximum fare levels if the fare structure is left unchanged.

Following consultation on the draft report, we will make our final decisions on the maximum level of fares. At this stage, we expect the Government will have considered our recommendations and announced its fare structure policy.

An indicative timetable for the review is shown in Table 1.1 below. We will update the timetable on our website (www.ipart.nsw.gov.au) as the review progresses. Information on how to make a submission is provided on page iii at the front of this report.

Table 1.1 Indicative review timetable

Event	Date
Release issues paper on fare structure	21 July 2015
Submissions on issues paper due	28 August 2015
Release discussion paper on fare levels	September 2015
Public hearing	September 2015
Submissions on discussion paper due	October 2015
Release draft report	December 2015
Submissions on draft report due	February 2016
Release final report	March 2016
Determinations to take effect	July 2016

Note: For the most up to date timetable information please see our website: www.ipart.nsw.gov.au

1.3 What is outside the scope of this review?

Our review will not consider the following matters, which are determined by the NSW Government and are not covered by the referral:

- The actual fares that will apply from July 2016. The Government may choose to set fares below the maximum determined by IPART but must not set fares above this level.

- Changes to the fare structure for paper tickets. As Government is progressively phasing out paper tickets, we are not considering the fare structure for these tickets.[2]
- The airport station access fee. Currently people entering or exiting the rail network at either of the Sydney Airport stations are charged a station access fee. This fee is subject to contractual arrangements between Transport for NSW (TfNSW) and the Airport station corporation.
- The public transport network and timetable – including network coverage, service frequency and proposed changes to services. Transport planning decisions are made by TfNSW.
- Fares for regular private ferry services provided under contract to TfNSW in the Sydney, Central Coast and North Coast areas of NSW.

1.4 How this issues paper is structured

The rest of this issues paper provides information and analysis to assist you in making your submission on the fare structure:

- Chapter 2 clarifies what we mean by fare structure and fare levels, and explains our proposed approach for making our decisions in both these areas of the review
- Chapter 3 discusses the current fare structure for Opal services in Sydney and the fare structures in other cities
- Chapter 4 looks at the case for a more integrated fare structure across the different modes of transport, providing examples of how the current distance-based fares could change under various options
- Chapter 5 focuses on the 'spatial' element of fare structure and outlines some the options for changing this element and our preliminary views on these options
- Chapter 6 discusses how the fare for using public transport should vary between peak and off-peak periods including how it should apply across modes
- Chapter 7 discusses the frequency element of fare structure and discusses some options for how fare discounts or caps apply after a certain number of journeys have been paid for within a defined period
- Chapter 8 considers whether the current arrangements for concession fares support optimal use of the network, in particular, whether there should be greater incentives for concession users to travel outside peak periods.

[2] Transport for NSW, *Ticket retirement*, Available from http://www.transportnsw.info/en/tickets/ticket-retirement.page Accessed 25 June 2015.

1.5 List of questions in this paper

Each of the chapters in this paper highlights one or more questions on which we particularly seek comment. For your convenience, these questions are also listed below. You are also welcome to provide input on any issue within the scope of the review.

Our proposed approach to the review

1 Do you agree with our proposed assessment criteria for the review? Which ones do you think are the most important and why? 19

Should there be a higher level of fare integration across modes?

2 Opal provides an integrated ticket but still charges different fares for different modes of transport. Do you see value in also making fares more integrated? 45

3 There are many different options for increasing fare integration. They range from further integration for multi-leg journeys, which retains mode-specific fares but puts measures in place to remove penalties for switching modes, to full integration where fares do not differ by mode of transport, or by the number of trips made in each journey. Which of these options do you support and why? 45

4 If you support full fare integration, would you continue to support it if it meant that fares for some journeys, in particular, single mode journeys made in the peak had to rise? Why or why not? 45

How should fares vary by distance travelled?

5 Sydney currently has a fairly flat distance based structure, with fares not increasing substantially over distance travelled, and not at all beyond the first 65 km for rail trips and 8 km for bus trips. Increasing fares for longer distance journeys would allow fares for shorter distance journeys to be lower. Is this something you would support? 59

6 A distance based fare structure that is based on kilometres travelled, rather than grouping the distance travelled into bands would remove the fare advantages/ disadvantages that currently apply to people who live or work near fare boundaries. This has the potential to help alleviate problems with parking at some stations and would be more equitable. However, it would also be more difficult for passengers to estimate their fare in advance. Which of these is more important to you? 60

7 Most cities that have flat fares (that is, a fare that is the same no matter how far you travel) have these fares applying to an inner ring of the city only.

Would you support a flat fare in the inner part of Sydney with distance based fares applying outside this zone? 60

How should fares vary by the time of travel?

8 We consider that there is value in discounting fares in off-peak periods. Currently this is done only on the rail network. Do you think that an off-peak discount should apply to other modes as well? Would you support this even if it means that peak fares for these modes need to rise? 69

9 Currently peak fares for trains apply between the hours of 7 am and 9 am (6 am to 8 am for NSW Train Link services) and between 4 pm and 6.30 pm, Monday to Friday with off-peak fares applying for trips where tap on occurs outside these hours. Should the definition of 'peak' times be longer or shorter? Are these times also the peak times for buses, ferries and light rail services? 69

10 Do you see value in having peak fares apply only in one direction or being replaced with a peak surcharge for journeys that enter the CBD in the morning and exit the CBD in the evening? 69

11 Would you support fares being more expensive in the peak and cheaper in the off-peak? If they were, would you be more likely to change your travel patterns earlier or later to avoid the higher fares? Why or why not? 69

What discounts should apply for frequent travel?

12 Do you receive any benefit from the current weekly and daily caps? Do you receive any benefit from the weekly travel reward? How fair do you think the current discounts are? 78

13 Does the weekly travel reward (free trips after you pay for the first eight journeys) encourage you to use more public transport than you would otherwise? Are you more likely to make shorter bus or light rail journeys early in the week in order to access the discount sooner? 78

14 Would you support discounted fares on more services (eg, a $2.50 daily cap for rail, bus and light rail travel on Saturdays and Sundays) if that meant that you were unable to use free trips during peak times? 78

Do concessions arrangements support optimal use of the public transport network?

15 Around 200,000 public transport trips are made on pensioner concession tickets every day (eg, Opal Gold). Passengers who travel on these tickets currently have no incentive to travel outside the peak when services are not as crowded. Do you support a higher peak travel charge for these products? If so, should this be combined with cheaper fares in off-peak times? 85

2 What is our proposed approach for this review?

As Chapter 1 discussed, for this review we need to do two things:

- provide advice on the best **fare structure** for Opal services, and
- determine the maximum **fare levels** for these services to apply from 1 July 2016.

The sections below discuss what we mean by fare structure and fare level, our proposed approach for deciding on the best fare structure and maximum fare levels, and our assessment criteria for guiding our decision making.

2.1 What do we mean by fare structure and fare level?

'**Fare structure'** means the range of elements that determine how the fare for a particular public transport journey is calculated. The elements include:

- Level of integration: how fares are calculated if the journey includes more than one trip (eg, three bus trips) and/or more than one mode of transport (eg, a train and a ferry trip).
- Spatial: if and how fares vary based on the origin and destination of the journey (eg, if there is a distance or zonal fare structure).
- Time: if and how fares vary by the time-of-day or day-of-week the journey is undertaken (eg, if there are peak and off-peak fares).
- Frequency: if and how fare discounts or caps apply after a certain number of journeys have been paid for within a defined period.
- User: if and how fares vary by customer characteristics, such as age and eligibility for concession fares.

'**Fare level**' means the total price for a particular journey. In general, this involves deciding on the relative contributions passengers and taxpayers make to the cost of delivering services based on:

- the costs of providing the public transport services
- the community-wide or external benefits of using these services, and
- the expected demand for these services and the price elasticity of this demand.

This is the first time we have considered fare structure and fare levels together across modes. In the past, Government has set fare structure by choosing which tickets to offer and the rules around their use, and we have determined maximum fares for these tickets.

To a large extent, the structure and level of fares are independent – for example, the same fare structure can apply even where fare levels are very different. However, there is some overlap between them. For example, if and how fares should change at different times of the day depends on if and how the appropriate fare level changes at each time of day.

2.2 How do we propose to make our decisions on fare structure and levels?

As Chapter 1 discussed, in making our decisions for this review we must consider both our legislative requirements and the matters specified in the Minister's referral. We propose to establish a set of assessment criteria for fares that reflects these requirements and matters, as well as the principles of good regulatory practice. We also propose to develop:

- a set of options for the different elements of fare structure discussed above, and
- a set of options for fare levels that reflects the efficient costs, external benefits and expected demand for public transport, and takes account of our view of the appropriate sharing of costs between passengers and taxpayers.

We will then assess how well these options meet the criteria. No fare structure or fare level will be able to meet all of the criteria at once. However, we will determine fares that strike the best balance between the various criteria.

Initially we will consult on and consider fare structure and fare levels separately. However, we will bring the two strands of the review together to form our advice on fare structure and make our draft decisions on fare levels. We will present our advice and draft decisions together in a draft report for further consultation. (See section 1.2 for more detail on our review process.)

2.2.1 Proposed approach for forming our advice on fare structure

This issues paper outlines our proposed options for each element of fare structure. It also provides our preliminary analysis of some options and our preliminary views (where we have them), and identifies the issues on which we particularly seek stakeholder comments. Once we have considered stakeholders' responses to this paper, we propose to:

- decide on the options we will assess for each fare structure element
- assess each option against the criteria, undertaking detailed analysis and modelling to inform this assessment

- form a view on our preferred fare structure by judging which options (and combination of options) strike the best balance between the various criteria
- test fare outcomes under our preferred fare structure and the current structure using our draft decisions on maximum fare levels, and
- consider whether there are technical or contractual constraints in the current Opal system that prevent our preferred fare structure from being implemented immediately, and if so, what transitional arrangements are needed to address these limitations.

In this issues paper, our preliminary analysis on fare structure **illustrates** how different fare structures might affect fare levels. For this analysis, we have assumed that total fare revenues from Opal services remain approximately the same as they are today. However, we will consider if and by how much these revenues should change from July 2016 when we make our draft decisions on maximum fare levels (see section 2.2.2). In our draft report, we will analyse how the different fare structure options affect fare levels using these draft decisions.

In addition, our analysis on fare structure relates only to the fares for the Opal electronic ticket. As paper tickets are progressively being phased out, we are not considering the fare structure for these tickets.

2.2.2 Proposed approach for making draft decisions on maximum fare levels

We will release a separate discussion paper to consult on the issues we will consider and the approach we will use to determine maximum fare levels. This second paper will be released in September, and will explain our proposed approach for this strand of the review in detail. However, in broad terms this approach will involve:

- deciding on the relative contributions passengers and taxpayers should make to the cost of delivering Opal services based on:
  - the efficient costs of providing the services
  - the value of the community-wide or external benefits of using these services
  - the expected demand for these services and the price elasticity of this demand
- using this information to develop a set of reasonable options for fare levels, and
- assessing these options against our assessment criteria to identify the fare levels that strike the best balance between the various criteria.

Under this approach, we won't necessarily set prices to generate revenue equal to the efficient costs minus the external benefits (as we have done in previous fare reviews). By assessing a wider range of options, we will aim to set prices that best balance the social and economic objectives reflected in the assessment criteria.

Box 2.1 provides an overview of the main information we will use in deciding how to share costs between passengers and taxpayers and determining fare levels.

Box 2.1 What we will consider in determining the level of fares

Efficient costs

The efficient costs of providing the services may differ from the actual costs incurred by the operators. In previous reviews, we have benchmarked the actual costs of providing services in Sydney to those in other jurisdictions. We found that actual costs are higher than efficient levels for rail, bus and ferry. As part of our work on fare levels we will again establish the efficient levels of expenditure by mode, and use these efficient levels when deciding on how to share costs between passengers and government. In addition, we will consider:

- **How these costs vary by location**: Different parts of the public transport network can be more or less expensive to provide. For example, as part of our last Sydney Ferries review we found that Parramatta River services were more expensive to provide per passenger journey than Inner Harbour services.
- **How these costs vary by time of day:** The efficient costs differ by time of day because demand for services differs across the day. The costs of providing services are higher during periods of peak demand because the main cost driver is the infrastructure required. In off-peak periods, this infrastructure may be underutilised.
- **How the total efficient costs differ from the costs of providing one additional passenger journey:** To determine fares that promote efficient use of the public transport network, we need to understand the cost of carrying any additional passengers those prices will attract. This cost will be greater for services close to their full capacity than for services that are relatively empty. We will estimate the costs associated with carrying an additional passenger for each mode.

Box 2.1 continued

External benefits

Transport imposes both internal costs (experienced by the person travelling) and external costs (experienced by others). The external costs of transport include pollution (air pollution, greenhouse gases and noise), some accident costs and costs associated with traffic congestion. These costs are borne by society through poorer health, higher mortality, medical costs, emergency services costs, and lower productivity.

All motorised forms of transport impose external costs, including private transport (car, motorbike, truck) and public transport (train, bus, ferry, light rail). However, the external costs of private transport are higher than those of public transport. Therefore, external costs are 'saved' when people use public transport instead of driving. These saved costs can be seen as 'external benefits' of using public transport.

The majority of the external benefits associated with using public transport are related to avoided road congestion. These benefits are greater at peak travel times.

We take account of these external benefits when we determine public transport fares to help ensure the price difference between public and private transport reflects these external benefits. This helps people to take them into account when they choose how to travel, and encourages them to make more efficient choices.

We recently reviewed our approach to valuing the external benefits of public transport, and released a draft report in late 2014.[a] As part of this fare review, we will consider how best to take external benefits into account when deciding on how to share the costs of providing public transport services between passengers and government. Our discussion paper on fare levels will explain how we propose to do this.

Demand for public transport

We will consider two aspects of demand in determining fare levels. The first is the expected change in the level of demand (or the total use of public transport). The second is the price elasticity of demand (or the extent to which the level of demand will change in response to a change in fare levels).

For this review, we will consider each of these aspects of demand by mode and at different times of the day, and use our analysis when deciding on how to share the costs of providing the services between passengers and government.

a IPART, *Review of external benefits of public transport - Draft Report*, December 2014.

2.3 What are our proposed assessment criteria?

We propose to use the following criteria to assess our selected options for fare structure and fare levels:

- encourages the efficient use of public transport
- promotes the efficient delivery of public transport
- encourages greater use of public transport
- minimises impacts on passengers
- is logical, predictable and stable over time, and
- increases farebox revenue or cost recovery.

As noted above, we will consider technical and contractual constraints of Opal in making our assessment and where necessary consider whether transitional arrangements need to be included. However, we have not included consistency with the current system as an assessment criterion. It is our view that, within reason, fares policy should guide the technology; the technology should not drive the fares policy.

2.3.1 Encourages the efficient use of public transport

Fares can encourage the efficient use of public transport by reflecting the different costs involved in different modes of transport (including the cost of providing public transport services and the social or external costs and benefits of using these services).

The efficient use of each mode of transport for new customers is one where the costs of providing the transport are equal to the benefits to the customer, plus the external benefits to society. Fares can encourage efficient use by encouraging people to:

- **Make more efficient choices between private transport (driving a car) and public transport.** Public transport imposes lower costs on society than private transport. When people choose to make a journey using public transport instead of driving, the lower social cost this creates can be viewed as an external benefit of public transport. Fares that take the external benefits of public transport into account encourage more people to choose public transport by making it cheaper than it otherwise would be.
- **Make more efficient choices between different modes of public transport.** The cost of providing a 5 km journey by bus is different from the cost by train, ferry or light rail. The external benefits associated with this journey also differ for each mode of transport. Fares that reflect these different costs and external benefits encourage people to make better choices between modes.

- **Make more efficient choices about the time of day they travel.** Public transport services tend to be very crowded in peak periods of the day and week, and can be almost empty in off-peak periods. Fares that encourage people who don't need to travel in peak periods to shift their travel to off-peak periods can delay the need for costly additional services to be provided in peak periods and increase the utilisation (and cost recovery) of existing services in off-peak periods.

2.3.2 Promotes the efficient delivery of public transport

Efficient delivery of public transport means that the transport provided to meet people's needs is provided in the most cost effective way. There are two aspects to this:

- **The right amount of the right type of transport is provided.** TfNSW must decide how much public transport to invest in and which projects to prioritise. There is a choice between public and private transport (ie, roads), as well between different modes of transport and different ways of delivering them (eg, increasing frequency of existing services, building a new rail line). This should take into account the complementarity of different modes (eg, in some cases it might be more efficient to provide bus services that interchange with train services rather than provide a single bus or train service for the entire journey). The efficient level of each mode of transport will be where the costs of providing the transport for additional customers are equal to the benefits to the customer, plus the external benefits to society.
- **The transport provided is delivered in an efficient way.** This means ensuring value for money in terms of new investments, as well as ensuring that the day-to-day operation of the network is efficient.

In terms of fare structure, the efficient delivery of public transport will be promoted by fares that encourage more efficient use of public transport. For example, it would not make sense to lower fares for services that are more expensive to provide, as this will raise demand for those services and encourage TfNSW to divert funding from more cost-effective solutions into providing more expensive services. Overall, this would raise the costs of public transport, which ultimately means higher fares, higher taxes, and/or reduced services.

In terms of fare levels, efficient delivery will be promoted by ensuring that passengers are not asked to pay for any inefficient costs (see Box 2.1).

2.3.3 Encourages greater use of public transport

Both the level and structure will affect people's decisions on if and how they use public transport. For example:

- Fare structure influences how user-friendly the system is. However, with the Opal electronic ticketing system, this influence is less than it used to be because passengers no longer have to work out the right ticket for their journey (the right fare is calculated automatically).
- Fare levels influence how the cost of using public transport compares to other options, including not travelling at all.

However, factors other than price are also important in influencing decisions on using public transport – particularly the quality of the services including the availability, convenience, frequency, speed, comfort, safety and physical accessibility of services. Therefore, while lower fares may encourage passengers to use more public transport in the short run, higher fares that produce more revenue can improve the capacity of the Government to increase the level of service provided. Over the medium to longer term, a better level of service can result in higher usage rates.

2.3.4 Minimises impacts on customers

Changes to both fare structure and level alter the price of using public transport for individual passengers. We consider that we should aim to ensure that passengers are protected from very large changes in fares. This may mean that we need to weigh other benefits (for example, having prices that reflect the cost of providing different services) with the customer impacts associated with it.

A simple example is the introduction of zonal fares, which repeatedly comes up as something passengers ask for in their submissions to us. Zonal fares can approximate distances based fares – for example, the further you travel from the CBD the higher the fare you pay. However, in a zonal system it is important where you travel not just how far you travel. Introducing a zonal system in Sydney would mean that fares for passengers who travel short distances over zone boundaries (for example, travelling by bus or train to the next suburb) may see extremely large increases in fares. We are interested in hearing from passengers about what they want their fares to look like and how they prioritise different things where there are trade-offs to be made. However, we also need to assess the impact on customers in terms of:

- equity – are people who make the same kinds of journeys paying the same fares, and
- affordability – does a particular option mean that some passengers will see large fare increases.

Where necessary, we will also consider whether the customer impacts mean that special arrangements should be put in place to transition fares from where they are to where they should be.

2.3.5 Is logical, predictable and stable over time

In our view, it is important that fare structures and levels are logical, predictable and stable over time. Fares that reflect these principles provide a fairer system, allow people to work out whether they are being charged correctly, and encourage more people to travel on public transport.

Fares that reflect these principles are also better at meeting some of the other assessment criteria. For example, price signals regarding how and when to travel will not be effective unless travellers understand them. If peak fares are higher to reflect the higher costs of providing services in the peak, customers need to understand the time periods that they will apply, and the savings they could make by shifting their travel to off-peak times.

2.3.6 Increases farebox revenue or cost recovery

Fare structure and levels affect what passengers pay for each individual trip. They may also have an impact on how much they travel, and even whether they choose to travel by public transport at all. As a result, both have an impact on the overall level of fare revenue collected and the level of Government funding.

While we support Government subsidisation of public transport, this funding needs to be considered against the backdrop of foregone alternatives. Government funding for public transport comes at the expense of increased funding for other government services (for example, education or health) or lower taxes. Spending on public transport is significant. In 2011-12, the level of Government funding for transport Public Trading Enterprises[3] was $3.7 billion, or around $25 per week from each household in NSW.[4]

There is also a decision to be made about whether the money that is being spent on public transport is better directed at improving the affordability of services for full fare paying passengers (through lower fares) or improving the services provided (through network augmentation and/or more frequent services).

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3 In 2011-12, transport Public Trading Enterprises included RailCorp, the State Transit Authority and Sydney Ferries, but not agencies such as Transport for NSW or Roads and Maritime Services that also contribute to providing public transport services, or private bus operators who receive Government contract payments.

4 IPART calculations; the ABS census data on number of dwellings in NSW was used to calculate weekly household cost in NSW (from the ABS's Table Builder); net Budget funding to transport agencies is taken from NSW Budget Statement 2014-15, Budget Paper No. 2, Table 9.3. The Budget funding figure does not include capital funding for new buses which is allocated through Transport for NSW.

As noted above, for the purpose of this paper we have provided examples of how different fare structures might look, assuming that the overall level of fare revenue stays roughly the same. However, in making our draft decisions on fare structure and fare levels, we will weigh increases in farebox revenue against the other criteria.

IPART seeks comments on the following

1 Do you agree with our proposed assessment criteria for the review? Which ones do you think are the most important and why?

3 What are current fares and how do they compare with fares in other cities?

Before we consider potential changes to the current fare structure, we need to understand what the current fare structure looks like and how it compares with fares in other places. The current structure is largely mode-specific – that is, key elements of the fare structure vary across modes, and there is a limited level of integration across modes. This stems from the way public transport services have historically been delivered in Sydney. However, recent changes to this delivery and the introduction of the Opal card have provided much more flexibility in how fares can be structured (see Box 3.1).

The sections below describe the current fare structure, highlighting the key differences across modes, and outline fare structures in other major cities.

Box 3.1 How the delivery of public transport has changed

Historically, there were many separate entities each delivering a single mode of transport, including many private bus operators. These separate entities retained the fare revenue for their services. Fares were mode-specific and there were limited mechanisms to share revenue between the different providers.

Today, Transport for New South Wales (TfNSW) is responsible for delivering all public transport services. It contracts with operators to deliver specified services for an agreed price. TfNSW now retains all the revenue, which is used to offset some of the costs of the contract payments to operators. This means that

- Payments to transport operators no longer depend on the fares collected, so there is more flexibility in what fares can be charged for individual trips.
- Public transport can be delivered as a network, so the most cost-effective mode can be used for different routes.

Some changes to fares have already occurred. For example, the same bus fares now apply across all metropolitan and outer metropolitan regions. The Opal electronic ticketing system has also been introduced. Passengers store value on their Opal card to pay for most public transport travel in Sydney, Blue Mountains, Central Coast, Hunter, Illawarra and Southern highlands. Passengers 'tap on' at an Opal card reader to start their journey, and 'tap off' at the end. The system calculates the fare based on where and when the journey starts and ends, and deducts it from the value on the card.

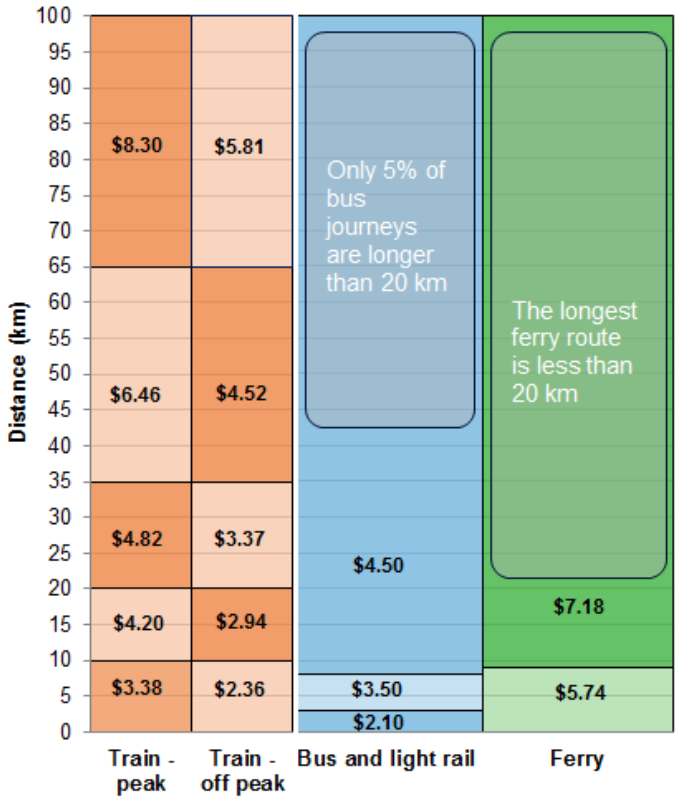
3.1 Current fares for Opal services

While some elements of the current fare structures for Opal services are the same across all modes, the fares are largely mode-specific because the key spatial element of the structure differs across modes. The time element also differs, and there is a limited level of integration across modes. In particular:

- **Level of integration**: there is integration within modes, as passengers who take more than one trip on the same mode within a specified time period are charged for a single journey. But for single fares, there is no integration between modes so passengers who switch from one mode to another to complete their journey are charged for two trips.
- **Spatial**: for all modes, fares vary by the distance travelled, and this distance is measured within bands rather than per kilometre. However, there are variations in the number and width of distance bands, the price charged for each band and the price caps for long journeys.
- **Time**: for all modes, fares for all journeys taken on Sundays are capped at $2.50. But only train fares include peak and off-peak prices on other days, and the definition of peak periods differs for Sydney Trains and NSW TrainLink Intercity services.
- **Frequency**: for all modes, passengers only pay for the first eight journeys they make within a week (subsequent trips are free). There are also caps on total daily and weekly fares. Because these discounts and caps apply to travel across all modes, they increase the level of integration across modes for many passengers.
- **User**: For all modes, concession fares are half the adult price, and pensioner and senior fares are capped at $2.50 per day.

Figure 3.1 shows the spatial and time elements of current Opal fare structures for **single journeys** (based on current fare levels). The sections below provide more information on the current level of integration, spatial, time and frequency elements.

Figure 3.1 Adult Opal fares for a single journey – comparison across modes



Data source: NSW Government, "Fare and Benefits", *Opal*, https://www.opal.com.au/en/fares-and-benefits/ , Transport for NSW, 2012/13 Household Travel Survey, Dataset Electronic Publication No. E2014-08-HTS-Annual Report version 1.0, *September 2014*, http://www.bts.nsw.gov.au/Statistics/HTS/default.aspx#top,

3.1.1 Current level of integration

For all Opal services, a single journey can be a single trip or a series of trips that are made within a specified time period **on the same mode**. This means that fares for single journeys are integrated within modes, but not between modes. Passengers who need to switch modes to complete their journey pay relatively more than those who stay on the same mode for the same distance travelled.

For example, for a passenger who travels 2 km on one bus and 5 km on a second bus within 60 minutes of the prior trip ending, the fare for the journey is calculated based on the total distance travelled.[5] This results in a lower total fare than would be the case if the passenger were charged for each trip separately.[6]

5 For up to 4 switches.

6 For example, based on current fare levels, this passenger will be charged $3.50 (the fare for a single 7 km trip), rather than $2.10 for the 2 km trip plus $3.50 for the 5 km trip (or a total fare of $5.60).

However, if this passenger travels 2 km on a bus then 5 km on a train within the same time period, the fare for each trip is calculated separately, resulting in a higher fare.

3.1.2 Spatial element of current fare structures

Figure 3.1 shows that for a single journey Opal fares are calculated based on the distance travelled.[7] For each mode, distances are grouped into different bands, and there are 5 distance-based fare levels for trains, 3 for buses and light rail, and 2 for ferries.

The size of the distance bands increases with distance travelled, so fares for shorter distances cost more per kilometre than those for longer distances. In addition, fares for longer distances are capped at:

- $8.30 in the peak (and $5.31 in the off peak) on trains, for journeys more than 65 km
- $4.50 on buses and light rail, for journeys more than 8 km, and
- $7.18 on ferries, for journeys more than 9 km.

For train journeys, the trip distance is based on the track distance, while for buses and ferries the distance is calculated using the straight line distance between where the passenger taps on and taps off.

3.1.3 Time element of current fare structures

For single train journeys, fares are 30% cheaper if they are taken in off-peak time periods, compared to peak periods. Off-peak periods include all-day on weekends and public holidays, and outside the peak periods on weekdays. These peak periods are:

- 7 am to 9 am and 4 pm to 6.30 pm within the Sydney Trains network area, and
- 6 am to 8 am and 4 pm to 6.30 pm in the NSW TrainLink Intercity services area.

For other modes of public transport, fare structures only have a time element on Sundays, when all Opal fares (including train fares) are capped at $2.50 for the day.

7 The two exceptions to this are on Sunday, where passengers pay up to $2.50 for all travel all day on any mode, and for any distance and the Opal Gold for seniors and pensioners.

3.1.4 Frequency element of current fare structures

For Opal passengers, the same frequency discounts apply across all modes:

- From Monday to Sunday, trips after eight journeys are free[8] and a weekly cap of $60 applies, regardless of the length or mode of the journeys.[9]
- From Monday to Saturday, there is also a daily cap of $15, and a $2.50 cap on Sundays.

Because the frequency discounts apply regardless of the journey modes, there is a higher level of integration across modes for frequent journeys than for single journeys.

3.2 How are fares structured in other places?

We have reviewed the fare structure in other Australian capital cities as well as international cities. We found that because fare structure includes so many different elements, few cities have a simple structure even if it appears simple on the surface. For instance, in many cities with flat fares, such as New York, this simple fare structure applies only to the inner ring of the city. Trips made outside this zone tend to be mode-specific and distance-based with a complex array of fare options.

In addition, by making it much easier for passengers to pay the correct fare, electronic ticketing can make a fare structure seem simpler than it is. For example, London is often cited as having a user-friendly public transport system even though there are over 600 individual fare levels that differ across modes, zones, time of day, period used, and the type of user.

3.2.1 Fare structures in other Australian capital cities

In Melbourne, Adelaide, Brisbane and Perth fares are fully integrated. The price of a trip between a given origin and destination is the same for all modes of transport, and regardless of how many trips are taken to complete the journey.

Figure 3.2 compares the spatial element of the fare structure for single journeys to and from the CBD in other capital cities with Sydney's train fare bands in peak periods (based on current fare levels). It shows that in Melbourne and Adelaide, passengers can travel anywhere in the metropolitan region on any mode for 2 hours for a flat fare.[10] In Melbourne, this flat fare is lower for passengers who do not enter the inner 15 km of the city. However, for those who make longer distance train journeys on the V/line network (outside of the inner 50 km to

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8 If a second trip is taken within 60 minutes of ending a prior trip, both trips are counted as one journey (this is extended to 130 minutes for the Manly Ferry service). https://www.opal.com.au/en/fares-and-benefits/60_minute_transfer/

9 Excluding the airport station access fee ($13 per journey, or $23 per week).

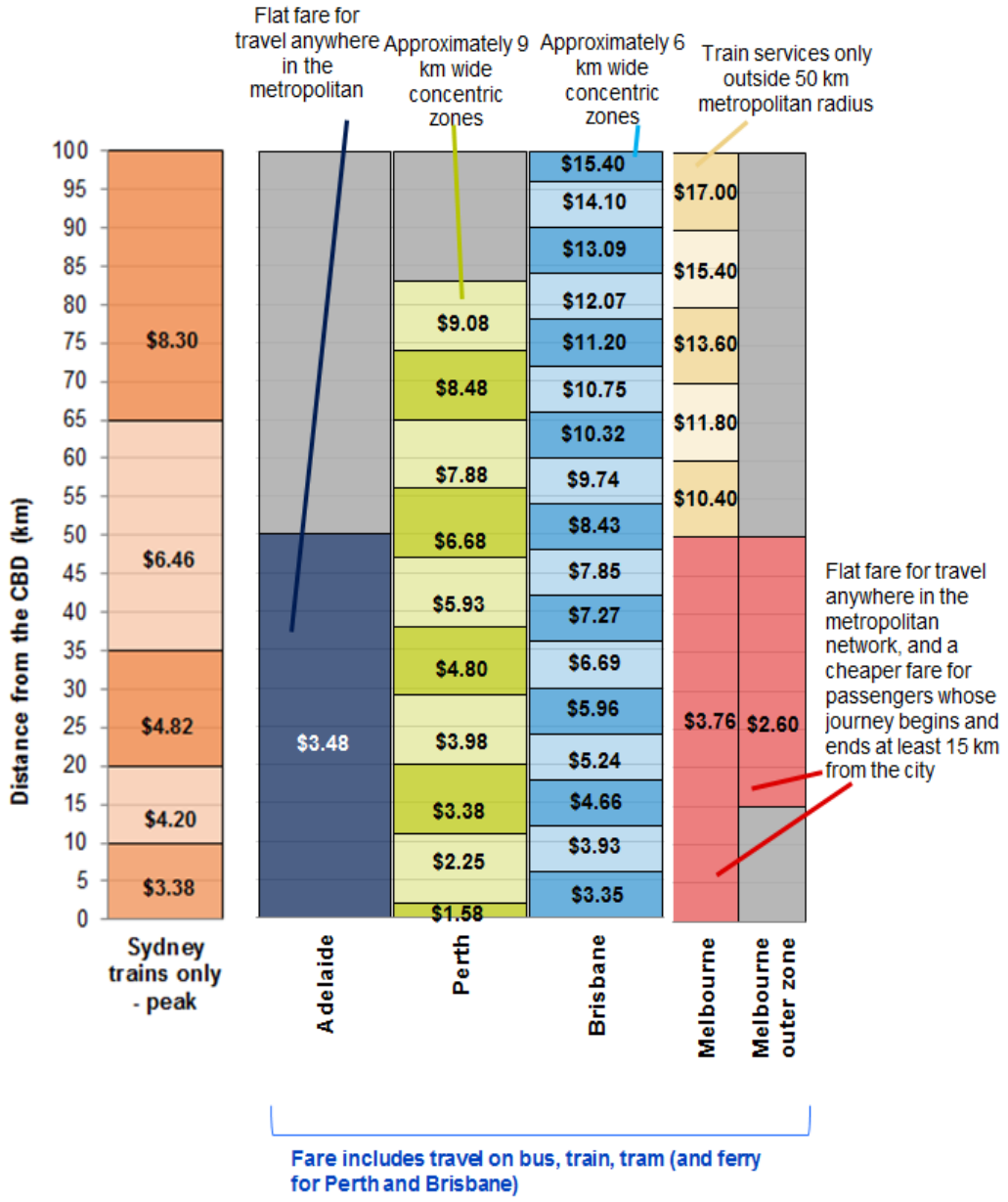
10 http://ptv.vic.gov.au/tickets/myki/myki-money/; http://www.adelaidemetro.com.au/FAQs

60 km Melbourne network) there is a separate distance-based fare structure. The levels of these fares are substantially higher than those for travelling the same distance in the Sydney network.

Passengers in Perth can use any mode and have two hours to complete a shorter journey, and three hours for a longer one. In Brisbane, transfers between modes must occur within 60 minutes, and there is a maximum of three transfers per journey. However, rather than flat fares, they have a concentric zone fare structure around the city centre.[11] The zones are approximately 6 km wide in Brisbane, and 9 km wide in Perth.[12]

11 http://translink.com.au/travel-information/how-to/how-to-transfer-between-services
12 http://www.transperth.wa.gov.au/Tickets-Fares/Fares

Figure 3.2 Intermodal adult fare structure in other states compared to Sydney train fare bands

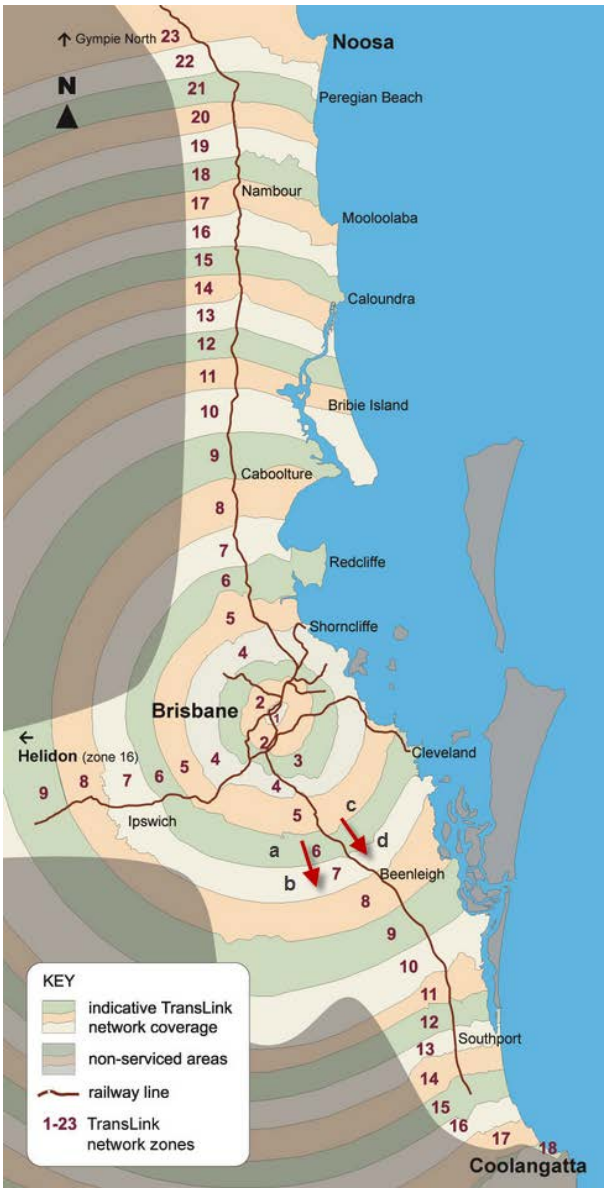


Source: http://www.transperth.wa.gov.au/Tickets-Fares/Fares, http://translink.com.au/travel-information/how-to/how-to-transfer-between-services.

The zonal fare structure in other Australian cities means that the fare charged is based on the location of the start and end point of a journey. While there is a relationship between distance and zones, in some cases a shorter trip will cost more than a longer one, and trips of the same distance can give rise to a different fare. For example, Figure 3.3 shows that for a 10 km journey in Brisbane passengers will pay:

- $3.93 if they travel across 2 bands (for example point a to point b), or
- $4.66 if they travel across 3 bands (for example from point c to point d).

Figure 3.3 Brisbane fare zones



Source: http://translink.com.au/sites/default/files/assets/resources/tickets-and-fares/fares/zone-map.jpg

3.2.2 Fare structures in international cities

We have looked at the key elements of the fare structure in a range of international cities – including whether they are intermodal or mode-specific, the spatial element, the time element, the level of integration and the user element.

Level of integration

For single journeys, London, San Francisco, Hong Kong and Tokyo have different fares for each mode, similar to Sydney.

Cities that have the same fare across modes include Rome, New York, Singapore, Amsterdam, Toronto, Madrid, and Paris. However, as in Melbourne, these intermodal fares only apply in the inner city bus and metro systems in many cities, and a separate fare structure applies in the longer distance rail networks.[13]

The way the trips are calculated for a journey differs across cities:

- Hong Kong has different fares for each mode, but the fare for the journey is integrated: the passenger only pays for the most expensive trip, and other trips made within a one hour transfer time are free (and the total trip can take up to two hours).
- In Chicago, passengers can buy a transfer ticket for 25 cents which allows an additional two rides within two hours, and in Tokyo a special transfer ticket can be purchased to provide a discount for additional journeys.
- In Rome, passengers have 100 minutes to complete a single journey on any mode (but the metro can only be used once in this time), and in Amsterdam transfers must occur within 35 minutes.[14]
- In New York, there is an automatic free transfer between metro and bus services for single journeys (but this does not extend to entering the metro system for a second time, such as for a return journey, or a metro-bus-metro transfer).
- In Singapore, a journey can have up to five different transfers.

Some cities do not differentiate fares by mode, but every trip has to be paid for separately, and so the level of fare integration is low. This means that if a passenger has to transfer from one service to another, they are charged separately. In some places, this is because they do not have an electronic ticket that recognises a new trip as being part of the same journey. These cities include:

- Toronto (although there are limited transfers available between some specified particular routes at particular stops).

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13 For example, Rome, New York and Paris.

14 http://www.amsterdamtips.com/tips/ov-chipkaart.php, http://www.rar-stadsregioamsterdam.nl/bin/544f577147840_RAR%20advies%20tarieven%202015%20GVB%20AMS.pdf

- Madrid (although passengers can transfer from metro to bus, they must pay for each bus boarding separately).
- Paris (passengers cannot transfer from metro to bus, but bus to bus transfers are allowed within 90 minutes).

Many of the cities that have an integrated single fare also have weekly or monthly tickets that allow for unlimited travel (New York, Rome, Singapore). For some of the cities that don't have an integrated single fare, the weekly or monthly ticket options include travel on all modes (Toronto, Hong Kong, Chicago). Other cities have mode-specific weekly and monthly fares, but also a more expensive option that includes travel on more than one mode (London – bus and train, San Francisco).

Spatial element

Rome and New York have a similar flat fare structure to Melbourne and Adelaide. All single journeys are the same price for distances up to around 11 km from the city centre on the metro in Rome. In New York, there is a flat fare for travel on New York City transit subway and local buses. Other cities differentiate fares by distance. Singapore and Amsterdam charge one flag fall per journey, with a uniform per kilometre charge applies to the distance travelled.

London has different spatial elements by mode. Buses have a flat fare, so that users pay £1.50 regardless of how far they travel.[15] For the Tube, fares are split into zones and cost more based on location and distance travelled (the fare for a given distance that passes through the central zone is more expensive than one that does not pass through the central zone). Fares for overland rail are different again.

Time element

Some cities offer a peak/off-peak price differential, which gives passengers an incentive to travel at less busy times to ease congestion and crowding and/or make use of spare capacity.

- In Melbourne, travel is free using the myki card on the electrified train network when you touch on and off before 7 am on a weekday.
- In Tokyo coupon tickets are differentiated by time of use – all times, off peak (weekdays 10am to 4pm, weekends, holidays and New Year period), and weekends/holidays. Packs cost the same as purchasing 10 single tickets, but passengers get more tickets in the pack – off-peak (12 tickets) and weekend (14 tickets).

[15] Transport for London, Bus and tram, Available from https://tfl.gov.uk/fares-and-payments/fares/bus-and-tram , Accessed 9 July 2015.

- Singapore is introducing an off-peak pass, which entitles passengers to travel all times except 6.30 am to 9 am and 5 pm to 7.30 pm on weekdays for a flat fee of $80 per month.
- In Vancouver, there is an evening (after 6:30 pm) and weekend flat fare for all zones.

In some cities, exclusions apply on who can use the off-peak tickets or on what modes they can be used.

- New York offers a 27% off-peak discount on fares for above-ground rail, but not the subway or buses.
- In London, off-peak fares are offered as a discount on the regular fare, but are not available for buses.
- In San Francisco, off-peak fares are not available for all passengers, but concession fares are available on cable cars after 9 pm and before 7 am.

Frequency discounts

Most cities offer some sort of frequency discount for passengers. These take the form of either:

- **A discount when purchasing multiple tickets:** For example, Madrid and Paris offer a 20% discount on packs of 10 tickets, compared to the single ticket price.
- **A capped price that allows unlimited travel over a fixed time period:** For example, Toronto, Singapore, Rome, Hong Kong mass transit railway (MTR), London (excluding ferries), New York, Vancouver and Chicago offer various day, week or monthly passes that may be cheaper to purchase than the equivalent single tickets.
- **A bonus scheme that rewards passengers with points or monetary value towards their next ticket**. For example, New York subway and bus passengers can get an 11% bonus if they add more than $5.50USD to their balance, which they can access when they next top up their card. In Hong Kong, there is a light rail bonus scheme that rewards passengers with 1 bonus point for every 10 cents spent. Once passengers have accumulated sufficient points, they can get a discounted fare on their next journey.

User element

Most cities also offer some sort of concession fare policy for children, disabled and elderly passengers. These include:

- Children under a certain age travel free.
- Older children and students travel at a discount to the regular fare.
- Disabled, elderly, veteran and selected welfare recipient passengers travel at a discount to the regular fare.

Some cities put conditions on the use of concession tickets. For example, in New York passengers with an over-65s or disabled ticket are restricted to travelling outside rush hours of 6 am to 10 am and 3 pm to 7 pm weekdays. Similarly, in San Francisco, concession tickets are only valid after 9 pm until 7 am. In Chicago, children under seven may ride free only with another fare-paying passenger. In Hong Kong, concession tickets are only available to be purchased as single tickets and not on the Octopus card. In Melbourne, seniors, disabled and selected welfare payment recipients may travel for free on weekends and are eligible for concession fares at other times.

4 Should there be a higher level of fare integration between modes?

As Chapter 2 discussed, the level of fare integration describes how fares are calculated if the journey includes several different trips – such as two bus services, or a bus and a train service and/or on more than one mode of transport. A fully integrated fare would mean that the fare schedule is the same for every mode, and trips made as part of the same journey are charged as a single journey.

Currently, the Opal card provides an integrated ticketing system that can be used on most of the public transport network. However, Opal fares are only partially integrated. As Chapter 3 discussed, there is some integration within modes, as fares for passengers who take more than one trip on the same mode within a specified time period are calculated as a single journey. But passengers who switch from one mode to another to get to their destination are charged for separate journeys, which results in a higher price.

We have been asked to consider whether there is a strong case for or against full fare integration across Opal services. As well as full integration, we will also consider other options for increasing the level of integration across modes. The sections below:

- provide examples to illustrate what full fare integration could look like with relatively minor changes to the current distance-based fares that are necessary to achieve consistency across modes, and
- discuss an example of a fare structure that is more integrated than current Opal fares but retains mode-specific fares and the current distance bands and peak/off-peak price differential.

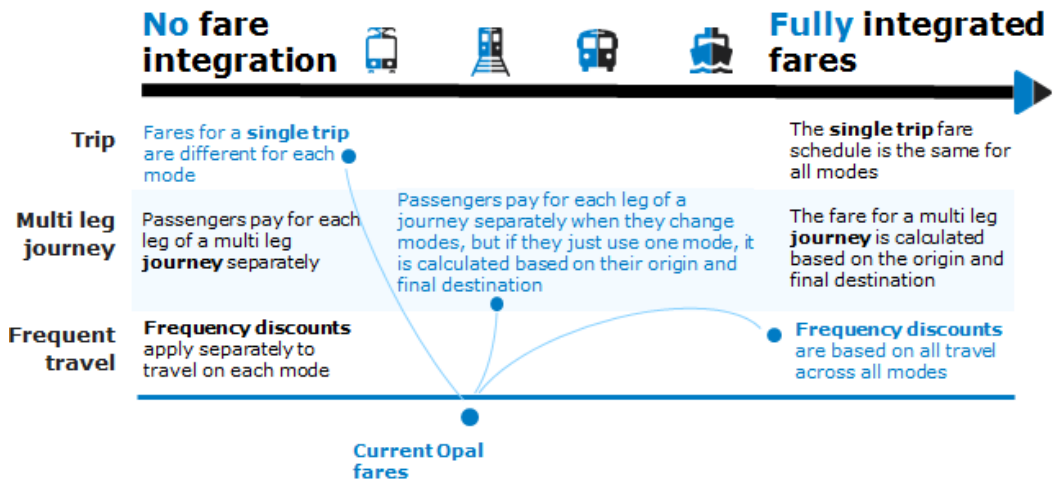
The examples in this chapter are illustrative of what a fare schedule might look like under these options. For these examples, we assume that total revenues will remain approximately the same as today, however we will also be looking at fare levels in the next stage of this review.

This chapter also provides preliminary analysis of how well these options meet our assessment criteria.

4.1 What options for further fare integration we could consider

Fare integration can be seen as a spectrum. At one end, there is no integration where there are different fares for each mode of public transport, and each trip is charged as a separate journey, regardless of whether it's made on the same or a different mode. At the other end, there is full integration where the same fare schedule applies to every mode, and trips made as part of the same journey are charged as a single journey regardless of their number and mode. Opal fares are currently somewhere in the middle of this spectrum (Figure 4.1).

Figure 4.1 What fare integration means



While current Opal fares are partially integrated, passengers who transfer modes to make a single journey are charged a higher price than those who don't. Currently, around 10% of paid Opal journeys involve more than one mode.[16] This penalises some passengers based on how they travel, and so is inequitable (See Figure 4.4). It may also discourage the Government from operating the public transport network in the most cost-effective way in order to minimise impacts on customers.

In this Issues Paper, we have focused on providing examples of what fares could look like if the level of fare integration was increased. This chapter looks in detail at two different options:

- **Full fare integration**, where fares do not vary by the number of trips that make up a journey or which modes they were made on.
- **Greater integration for multi-leg journeys**, where fares for a single trip continue to be different for each mode but passengers are not charged for two separate trips if they switch modes.

16 Data from Transport for NSW, provided 24 June 2015.

Each of these options would reduce the price for single journeys made using trips on different modes, and so would address the main drawback of the current mode-specific fares. However, this also means that prices for other single journeys would need to increase to make up for the lower fares being paid by passengers who switch modes in order to keep total revenues at approximately the same level as today.

In this chapter we have focused on providing examples of these options under a distance-based fare structure, consistent with current fares. However, each of these options is equally applicable to an alternative spatial structure such as zonal or flat fares (see Chapter 5). We are interested to know whether stakeholders would like us to also consider other options.

4.2 What a more integrated fare schedule might look like

To help stakeholders provide feedback on whether fares should be further integrated, we have developed some examples of how the fare schedule might look under the various options. As Chapter 2 explained, the preliminary analysis in this issues paper (including these examples) assumes that total fare revenues from Opal services remain approximately the same as today.[17] However, we will consider if and by how much these revenues should change from July 2016 when we make our draft decisions on maximum fare levels later this year. Therefore, the fare levels shown in these examples are illustrative only.

Our modelling assumes that the current $15 daily cap applies. Therefore, even though the fare for some long distance journeys increases in our examples, for return journeys, passengers will not pay more than an average $7.50 for each direction of the journey.

4.2.1 Example of what fully integrated fares could look like

Under this option, a single fare schedule would apply across all modes. This would mean the fare for a 5 km journey would be the same, regardless of how many trips it involves and whether those trips are by bus, train, ferry or light rail. A number of changes would be required to other elements of the fare structure to achieve fully integrated fares:

- The distance bands and caps would need to be the same for each mode if the current spatial fare structure is maintained. The distance of each trip would also need to be measured in the same way for each mode. Currently the distance travelled on a train is based on track kilometres, but for buses it is based on the straight line distance between the passenger's origin and destination.

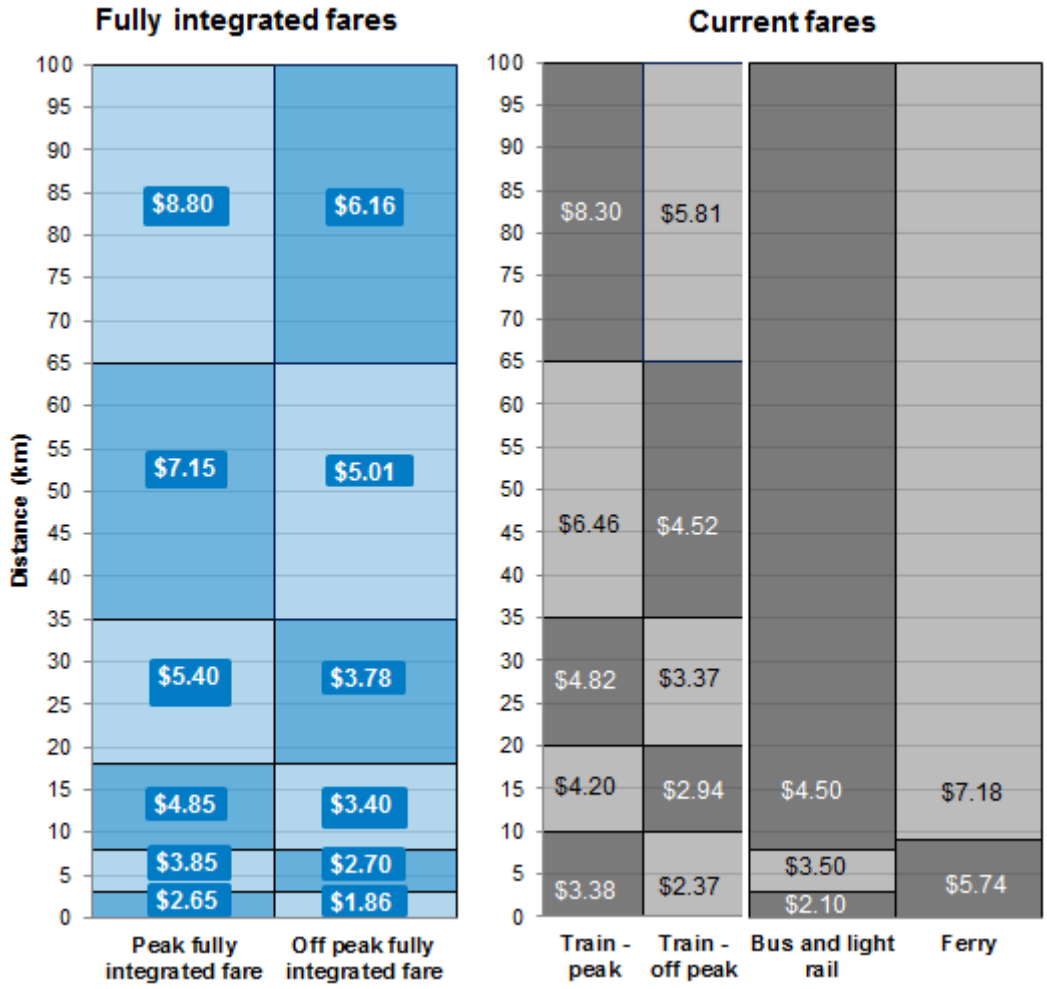
[17] In order to do this we have assumed that there is no change in people's travel behaviour.

- Peak and off-peak fares would also need to be aligned across modes. Currently only train fares differ by time of travel. Integrating fares across modes would require this differential to be removed for train trips or to be introduced for trips on other modes. This has implications for both network efficiency and the fare changes faced by passengers.

Chapters 5, 6 and 7 discuss the specific issues associated with the spatial, time-based and frequency discount elements of fare structure in more detail.

Figure 4.2 shows one example of an integrated fare schedule, and the change in fare levels compared to current fares for passengers who make a single journey comprising one trip.

Figure 4.2 Example of fully integrated fares



Note: This analysis assumes no changes to the number and type of journeys, and that the existing travel rewards continue to apply.

Data source: NSW Government, "Fare and Benefits", *Opal,* https://www.opal.com.au/en/fares-and-benefits/, 2015, IPART analysis.

In this example, off-peak fares for all modes are 30% lower than the peak fare (consistent with the current off-peak discount for rail customers). It uses six different distance bands, combining the bus fare bands with the upper train fare bands:

- 0-3 km
- 3–8 km
- 8–18 km
- 18-35 km
- 35–65 km, and
- 65 km+.

Under this example fare schedule, some passengers would benefit from reduced fares:

- All ferry passengers would pay substantially less – the fare for peak trips would fall by around a third to Manly, and half for short distances. In the off peak, most single ferry fares would fall by around 50%.
- Most bus passengers travelling in the off-peak period would pay around 10% to 25% less, except those travelling over 35 kms.
- Rail passengers travelling less than 3 km would pay around 20% less.
- Passengers who switch modes within a single journey would pay one lower fare instead of a separate fare for each trip.

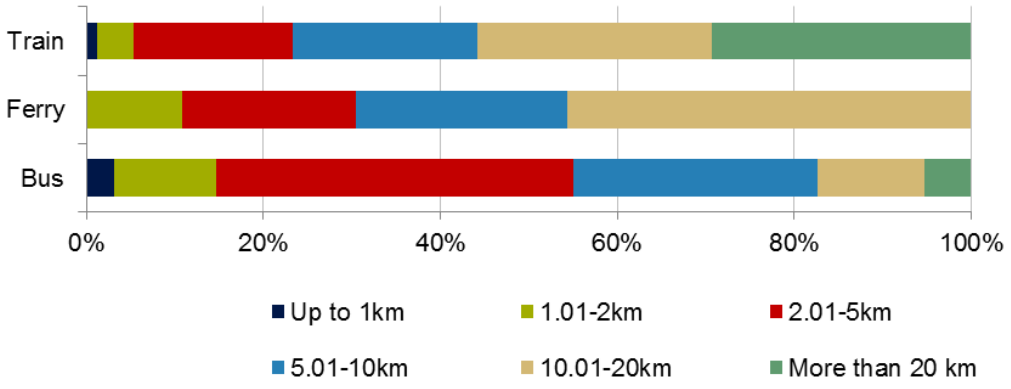
However, because over half of all bus journeys are taken in the off peak, these fare reductions need to be offset by fare increases for rail journeys, and peak bus journeys in order to maintain the current amount of revenue:

- Most rail passengers would pay around 10% to 15% more.
- Most bus passengers travelling in the peak would pay around 10% to 25% more, with significant fare increases of around 60% for bus journeys over 35 km made in the peak (less than 1% of bus trips – see Figure 4.3). Fare increases for bus passengers travelling between 35 km and 65 km in the off-peak would be around 10%.

While these are very large increases for long distance bus passengers, their fares would be similar to what train passengers currently pay to travel the same distance and relatively similar to what bus passengers paid for this distance of travel in the past (see Chapter 5 for more information).

This example also assumes that train journeys are charged based on the straight line distance, rather than the actual route that they travel. Therefore, passengers will be charged for a lower distance. In some cases, this could result in substantial fare reductions. For example, the fare for passengers travelling from Cronulla to the CBD would be based on a distance of around 20 km, instead of the 38.10 km of track distance (including the city loop).

Figure 4.3 Distance travelled by mode based on (Household Travel Survey)



Data source: Transport for NSW, 2012/13 Household Travel Survey, Dataset Electronic Publication No. E2014-08-HTS-Annual Report version 1.0, *September 2014*, http://www.bts.nsw.gov.au/Statistics/HTS/default.aspx#top

4.2.2 Example of what fares could look like where fares are mode-specific but passengers who switch modes do not pay for two separate trips

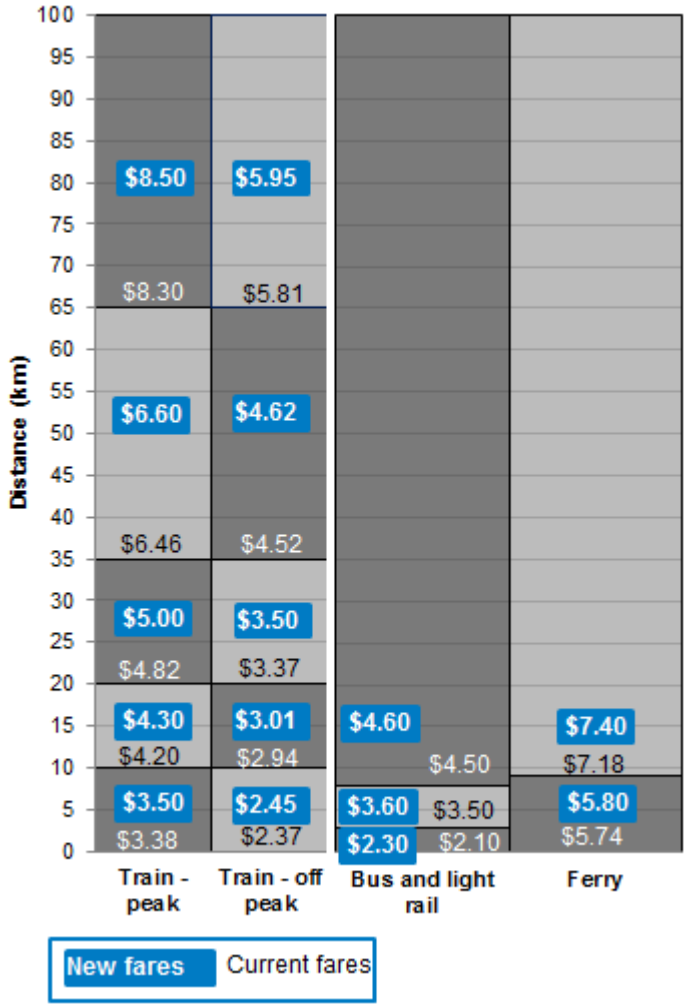
It is possible to increase the level of integration without moving to a fully integrated fare structure. For example, fares could remain different for each mode, reflecting the different costs and benefits of that mode. However, they could be further integrated for passengers who use more than one mode to make a journey, so that passengers are not charged for two separate trips. This would reduce or remove the 'penalty' for switching modes under the current structure. However, as for the full fare integration example, prices for other single journeys would need to increase to off-set this fare reduction and still retain the current level of fare revenue. Under this model of partial integration, aligning peak and off peak times across modes would be optional.

One way to further integrate fares would be to set the fare based on the straight line distance between the origin and destination of the entire journey, and assume that the passenger has made the whole journey on one mode. This could be the most expensive mode, or the mode that was used to travel the furthest distance. Under this option, the distance between the origin and the destination would be measured based on the straight line distance between the origin and destination. Like in the example for fully integrated fares, train journeys would not be measured based on the track distance as they are currently, which means that in some cases, they would move into a lower fare band for this journey.

There are other ways to further integrate fares that would involve fewer changes to the current fare structure. For example, journeys could continue to be measured in the same way as they are currently measured (so that train journeys continued to be measure based on the actual route travelled, and ferry and bus trips are measured based on the straight line between the origin and destination), but set the fare based only on the distance travelled for the most expensive trip.

This would mean that the cheaper trip would be free. Figure 4.4 shows an example of how the fare schedule might look if this approach was adopted. It largely maintains the current fare relativities between modes and distances, and the off peak discount is not extended to bus and ferry. In this example, because bus passengers continue to pay an "all time" fare, large price increases offsetting off peak bus fares are not required. Instead there are more modest increases – most of the increases are less than 5% - to offset the lower fares paid by passengers who switch modes.

Figure 4.4 Illustrative example of mode-specific fares where passengers who switch modes only pay for one mode



Note: This analysis assumes no changes to the number and type of journeys, and that the existing travel rewards continue to apply.
Data source: IPART analysis.

4.3 Preliminary assessment of the case for further fare integration

We have done some preliminary analysis on how well the various options meet our assessment criteria. Once we have developed options for different fare levels in the next stage of the review, and have analysed the different costs of providing different modes, we will be able to consider different combinations of fare levels and fare structure elements. Then we will assess which of these combinations strikes the best balance between the assessment criteria and results in the appropriate level of farebox revenue. The sections below outline our preliminary analysis.

4.3.1 Which approach best encourages more efficient use of public transport and promotes more efficient delivery of public transport?

Both mode specific fares and fully integrated fares can help drive efficiencies in the use and delivery of the public transport system. However, in our preliminary view, an approach that retains mode-specific fares has greater efficiency advantages. In particular, it would allow prices for each mode to be set at the efficient level, which:

- provides the most efficient signal about how much public transport to deliver and to use
- can help manage demand on capacity-constrained modes, and
- can allow for more cost-reflective fares so that efficient private transport operators are able to compete with them.

However, improving the level of integration could encourage more efficient service delivery. In particular, reducing the price that passengers pay to switch modes may encourage the Government to provide services in the most cost-effective way.

Mode-specific fares provide the most efficient signal about how much public transport to deliver and to use

Chapter 2 explained that the cost of providing a 5 km journey by bus is different from the cost by train, ferry or light rail. The external benefits associated with this journey also differ for each mode of transport. People may also be willing to pay more for one mode rather than another because it is quicker, more convenient, and/or more comfortable. These differences between modes mean that the efficient fare for each service will be different.

The efficient fare level is where the costs of providing the service to an additional passenger are equal to the benefits to that passenger and the wider community. Setting fares at this level ensures that the right amount of each service is consumed and provided, so that the additional costs of providing more services are not greater than the additional benefits to users and the wider community.

As shown in our example in Figure 4.2 above, if the single journey fare were set at the same level for buses, trains, and ferries, (and total fare revenue is held constant), fares for the peak buses would increase, while fares for the most expensive mode (ferries) would fall significantly. Not all those who would catch bus services at the efficient price would be willing to do so for the higher price, even though delivering the services would be efficient. For ferry services, many more people than are willing to pay the efficient price might want to use these services at the lower price. The cost of delivering more ferry services to meet the additional demand would outweigh the benefits to users and the community. In the long run, this would mean that public transport costs taxpayers and passengers more than it should.

In addition, mode specific fares enable a more efficient signal to be sent about when to use public transport, because the peak and off peak time would not have to align between modes. As Chapter 6 explains, peak demand is a primary driver of capital costs, but the peak times for rail and ferry are very different. Therefore aligning the peak and off peak times across modes under a fully integrated fare structure would lead to less efficient fares.

Mode-specific fares can help manage demand on capacity-constrained modes

One factor that determines the efficient level of public transport fares is how close the service is to reaching capacity. Once a service reaches capacity, the costs of delivering it increase because additional vehicles and/or infrastructure are required. Therefore, for a more capacity-constrained mode the efficient fare level will generally be higher than for a mode with spare capacity.

With mode-specific fares, the capacity of the mode can be taken into account in setting fare levels and thus help to manage demand on capacity-constrained modes. For example, setting a higher fare level for a capacity-constrained mode and a lower fare level for a mode with spare capacity can encourage passengers to choose the mode with spare capacity. This can delay the need for capital investment in the capacity-constrained mode, thereby lowering the costs of providing transport to users and taxpayers.

With fully integrated fares, some passengers may shift their travel modes from capacity-constrained modes in response to higher waiting times or crowding. However, fares cannot be used to manage demand by encouraging a further shift to the modes with spare capacity.

Mode-specific fares can better enable competition for ferry services

Competition can produce efficiency savings for the Government because it means that some of the services can be delivered by privately funded operators (not under government contracts). Competition also drives innovation and better quality services. Currently only privately funded ferry services and bus

services more than 40 km are allowed to compete with Government-funded operators.[18]

In Sydney, only one privately funded ferry service competes on the Manly to Circular Quay route. The Government-funded ferry service already enjoys some competitive advantages because its fares are lower than the privately funded service. In addition, journeys made on ferries are included in the $15 daily fare cap for Opal passengers. This means that if a passenger is making a return journey on the Manly ferry, all additional travel made on other modes, including connections to and from the Manly ferry will cost a passenger less than 70 cents a day. Passengers using the privately funded service would have to pay the full cost of other travel (up to $15 a day) on top of their ferry fares.

Integrating fares would further increase the price differential between them and the privately funded services, and is likely to cause some passengers to switch to the Government-funded services. If the patronage falls substantially on the privately funded ferry services, they may no longer be able to compete with the Government-funded services. This may mean the Government has to provide additional ferry or bus services to meet total demand, increasing the cost for taxpayers and fares for users of other modes. It may also provide a barrier to competition emerging in the future, entrenching Government-funded services. In addition, it may result in lower service quality on the Government-funded ferries due to reduced competition.

To help address this issue, a surcharge could be added to an integrated fare level for journeys that include travel on a ferry. This additional ferry revenue would also allow the integrated fares to be lower than if they were fully integrated without a ferry surcharge, for the same level of fare revenue. However because revenue from ferries only represents around 4% of total revenue from public transport, our modelling suggests that with a $2.80 surcharge on journeys that include a ferry trip, the fully integrated fares in each fare band would only fall by around 10 cents.

More integrated fares can also encourage more efficient service delivery

As discussed above, the main problem with the current mode-specific fares is that if passengers switch modes within a journey, they pay the full cost of both fares.[19] As Figure 4.5 shows, the total cost of a journey made on a bus and a train is currently significantly higher than if the same-distance journey is taken by bus only or by train only.[20] For example, the total price for a 25 km journey is:

- $4.50 if taken using one or more buses.

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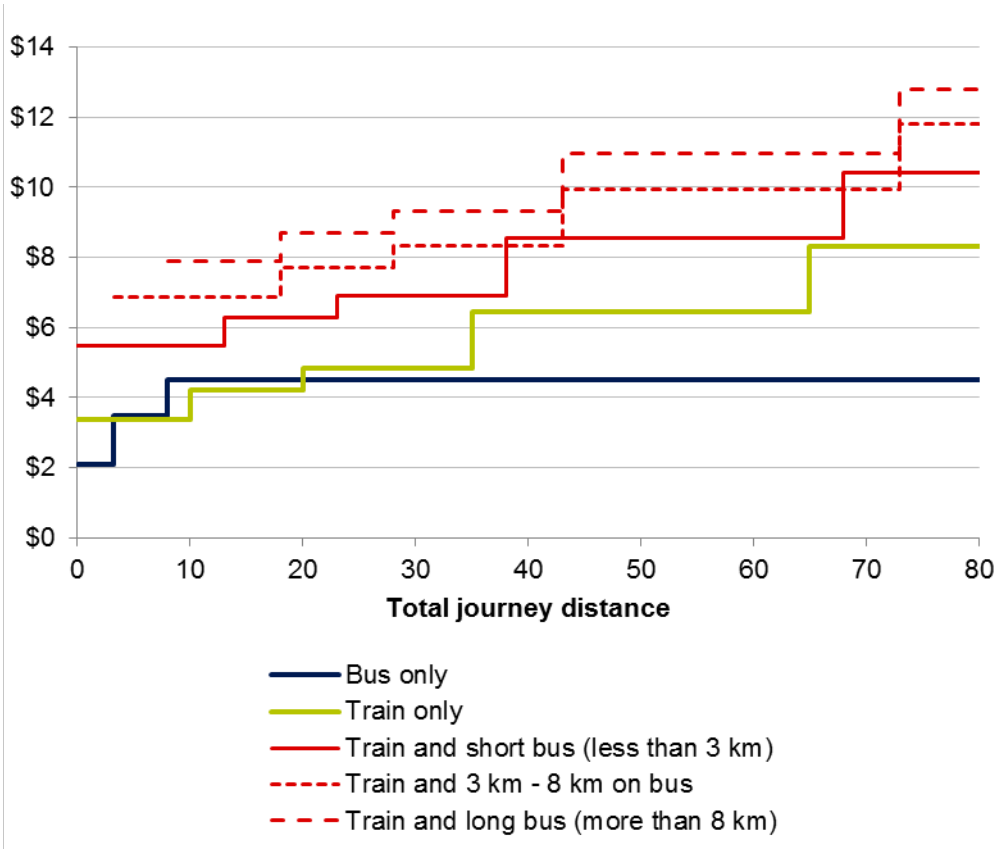
18 *Passenger Transport Act 1990*, section 16.

19 Around 10% of journeys made on public transport comprise trips on more than one mode.

20 These fare differentials reduce with the number of journeys taken over a day and a week, because the fare capping in Sydney is not mode by mode, but includes trips taken on all modes. In Sydney all fares are subject to a $2.50 cap, and so most customers do not pay more if they switch modes.

- $4.82 if taken using one or more trains.
- $7.70 if it includes a 20 km train journey and a 5 km bus trip. This is 60% higher than if the whole total trip was taken by train.

Figure 4.5 Fare by distance for combined bus and train journey



Data source: Transport for NSW, "Fares and Benefits", 2015, accessed 14 July 2015, *Opal*, https://www.opal.com.au/en/fares-and-benefits/, IPART analysis.

Charging passengers more if they switch modes may discourage the Government from operating the transport network in the most cost-effective way. For example, it may be more cost-effective to run more 'shuttle' bus services to stations and wharfs where there is spare capacity on ferry and train routes, rather than operate multiple modes of transport along a route. However, under the current fare structure, if the network were optimised so passengers who previously used one mode had to use two these passengers' fares for a single journey would increase by at least 25%, and in some cases double (Figure 4.5). As a result, despite the potential costs savings, the Government may avoid making changes to services to avoid potential passenger backlash to higher fares.

Integrating fares to reduce prices for passengers who switch modes may help encourage the Government to provide services in the most cost-effective way, promoting more efficient service delivery.

4.3.2 Which approach best encourages greater use of public transport?

As for any change in fare structure, moving to more integrated fares will mean that some people will pay more than today and others will pay less. Therefore, some passengers may use public transport less than they do today, and others may use it more.

A more integrated fare would result in a significant fare reduction for people who switch modes within a single journey, therefore it may increase the number of these passengers. The offsetting fare increase for those who do not switch modes is likely to be moderate, so the decrease in the number of these passengers may not be as large. However, we consider that changes in frequency discounts and weekly fare caps (which are already integrated between modes), are likely to be a larger influence on how many people use the public transport network than further fare integration. This element of fare structure is discussed in Chapter 7.

4.3.3 Which approach minimise impacts on customers and are more logical, predictable and stable over time?

Initially, the more integrated fares become, the greater the number of people who will be impacted, and the bigger the impacts will be. However, as changes are made to the public transport network, a more integrated fare structure is likely to minimise the impacts on passengers in the longer term. Fare increases in the future could also be lower if more integrated fares produce cost savings by encouraging the Government to provide services in the most cost-effective way.

Under the current fare structure, changes to the network are dealt with through creating exceptions about how fares are calculated. These exceptions are designed to reduce the impacts of network changes on customers. A more integrated fare would mean there is no need for such exceptions, so fares would be calculated on a consistent basis.

The Government's decision to replace buses down George Street with light rail provides a good example of how changes to the public transport network could have significant customer impacts unless fare exceptions are put in place. The George Street light rail will mean that passengers travelling from the inner west and the north shore will no longer be able to continue their journey through the CBD by bus. Instead, they will need to switch to light rail or a train if they wish to catch public transport through the CBD. The Government has announced that the CBD light rail will be priced as if it were a bus to ensure that passengers who transfer from bus to light rail will not pay more.[21]

[21] Minster for Transport, *Media Release – Opal to go live on light rail months ahead of schedule as 1.4 million cards issued*, 24 November 2014, p 2, Available from http://www.transport.nsw.gov.au/sites/default/files/b2b/releases/20141124-opal-light-rail.pdf

Another example is in Newcastle, where the rail service has recently changed so it starts and ends four stops earlier at Hamilton Station. From 2017, a light rail line will take passengers from Hamilton to Newcastle instead, but until then the service is being provided on a bus.[22] Under the current fare structure, passengers would pay substantially more to transfer to a bus for the remainder of their journey. Instead, the Government has decided that rather than charge passengers mode-specific fares, passengers will pay for an integrated fare based on the train fare. This means that passengers who are continuing their journey by bus are only charged one fare, as if the entire journey has been completed by rail.

Other exceptions to mode-specific fares that are currently in place include:

- Passengers who catch the Stockton ferry and a bus are charged a single **bus** fare for the total distance travelled.[23]
- Previously, the replacement bus service for the discontinued Toronto to Fassifern rail services was a free service, so that rail commuters to Newcastle or Sydney would not pay any more.[24]

If the Government makes changes to the way the network is delivered, there is firstly a question about whether it is fair and efficient that customers should pay more, particularly if the benefit accrues primarily to the Government and the taxpayer (eg, if the service delivery augmentation is more cost-effective) or the community (eg, if it reduces congestion for cars). Secondly, where an exception is created so that these passengers do not pay more, there is a question whether it is fair that some passengers pay more to change modes, and other passengers do not.

We consider that at the very least there should be a consistent approach to setting fares across different services. Creating exceptions when changes are made to the network introduces complexity and uncertainty. It can be an impediment to changing the network in response to the changing needs of passengers and cities over time.

4.3.4 Which option would improve farebox revenue or cost recovery?

Any fare structure can lead to fare levels that either result in lower farebox revenue, the same farebox revenue (like the examples discussed in this issues paper), or higher farebox revenue.

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22 Transport for NSW, *Your guide to the Newcastle transport changes,* December 2014, http://www.transportnsw.info/resources/documents/brochures/guide-newcastle-transport-changes.pdf

23 https://www.opal.com.au/en/about-opal/opal_in_newcastle/

24 Customers that use a rail service and the connecting bus with an Opal ticket are now required to pay for both journeys separately. http://www.lakesmail.com.au/story/2581377/opal-card-woes-free-toronto-bus-service-now-costs/

As Chapter 2 indicated, we will consider the extent to which farebox revenue should increase from July 2016 as part of the review of maximum fare levels. We will explain how we propose to do this in our discussion paper on fare levels, to be released in September.

IPART seeks comments on the following

2 Opal provides an integrated ticket but still charges different fares for different modes of transport. Do you see value in also making fares more integrated?

3 There are many different options for increasing fare integration. They range from further integration for multi-leg journeys, which retains mode-specific fares but puts measures in place to remove penalties for switching modes, to full integration where fares do not differ by mode of transport, or by the number of trips made in each journey. Which of these options do you support and why?

4 If you support full fare integration, would you continue to support it if it meant that fares for some journeys, in particular, single mode journeys made in the peak had to rise? Why or why not?

5 How should fares vary by distance travelled?

A key element of fare structure is the spatial element, which describes how fares are calculated based on the origin and destination of a journey. This can be based on the distance between them, the zone they fall into (under a zonal structure), or the fare can be the same for all origin and destination combinations (a flat fare).

Chapter 3 explained that in Sydney, the spatial element of the fare is calculated based on the distance between the origin and the destination, and the distances are grouped into fare bands.

This chapter discusses the rationale for distance-based fares. It then considers potential changes to the current distance-based fare structure, which need to be considered if fares are to become more integrated. In particular:

- the balance between fares for long and short distances
- whether distance travelled should continue to be grouped into bands, or fares should increase more consistently with distance travelled, and
- whether current differences in how distance is measured for each mode should be removed.

This chapter also discusses alternative fare structures, such as introducing a flat fare or zonal fare. However, our preliminary view is that either of these would involve significant price increases for a lot of passengers and result in fares that are less equitable, and less efficient than distance-based fares.

5.1 Rationale for distance-based fares

Fares that vary with distance travelled are more efficient than other types of fares because:

- it costs more to provide a longer distance service than a shorter distance service and because fewer people use these services, the costs are shared among fewer passengers
- people are generally willing to pay more the further that they travel, and
- the further a journey extends outside of the CBD, the lower the external benefits of using public transport instead of driving as the roads become less congested.

However, the relationship between the efficient price and distance travelled is not straightforward. For example, capping fares once they reach a certain level may be efficient if:

- It reflects that less additional capital investment is required over time to transport additional passengers for long distance train services because these services have spare capacity. Therefore, the costs of providing them may grow more slowly than for services on the metropolitan area, which are capacity constrained during peak times.
- It encourages greater utilisation of these services to help recover investments that were made in the past. As prices increase, passengers travelling longer distances may be more likely to switch away from using public transport compared to passengers travelling shorter distances, because:
  - the levels of car ownership are higher in the areas outside Sydney compared to inner Sydney areas
  - the service quality is lower than for metropolitan services (for example, journey times may be slower by train compared to car, especially in the uncongested parts of the road network outside of the Sydney metropolitan area, and frequency is lower), and
  - the total price is higher.

Having people who travel longer distances pay more is also more equitable in the sense that it means that people who only ever travel short distances do not pay more as a result of the decision to provide expensive longer distance services. It also means that all passengers pay a similar amount for each kilometre that they travel. However, it may be less equitable if it predominantly affects people on lower incomes who commute long distances to work.

5.2 Potential changes to the current distance-based fare structure

As noted in Chapter 4, moving to a fully integrated fare would require the same spatial structure for all modes of transport. Currently fares are distance based for all modes, but the relativities between short and long distance fares is very different for each mode. This is because the number and the size of the distance bands are different, and fares are capped at different levels.

5.2.1 Do we have a good balance between the price of long distance journeys compared to short distance ones?

Figures 5.1 and 5.2 show that fares for short distance journeys have remained roughly constant during the past two decades, while fares for long distance rail and bus journeys have fallen significantly.[25] As a result of the 2010 consolidation of fare bands[26], train fares for journeys over 65 km, and bus fares for journeys more than 25 km are much lower than they used to be. For example, the single fare to Newcastle (around 160 km from the Sydney CBD) has fallen by around 70% in real terms over the last 20 years.

There are currently five distance bands across the train network, three for bus and light rail networks, and two for the ferry network. However, in the past there were many more – 25 for trains, five for buses operated by the State Transit Authority (STA), and four for ferries.[27] Until 2005, privately operated buses had 70 different fare levels, with fares increasing by a small amount for every 1.6 km travelled.[28]

Today, Opal rail fares for a single journey are capped for distances over 65 km at $8.30. Twenty years ago, rail fares increased in 10, 20, and 50 km increments up to 305 km, so that the highest fare was $32 (or $54.80 in today's dollars).

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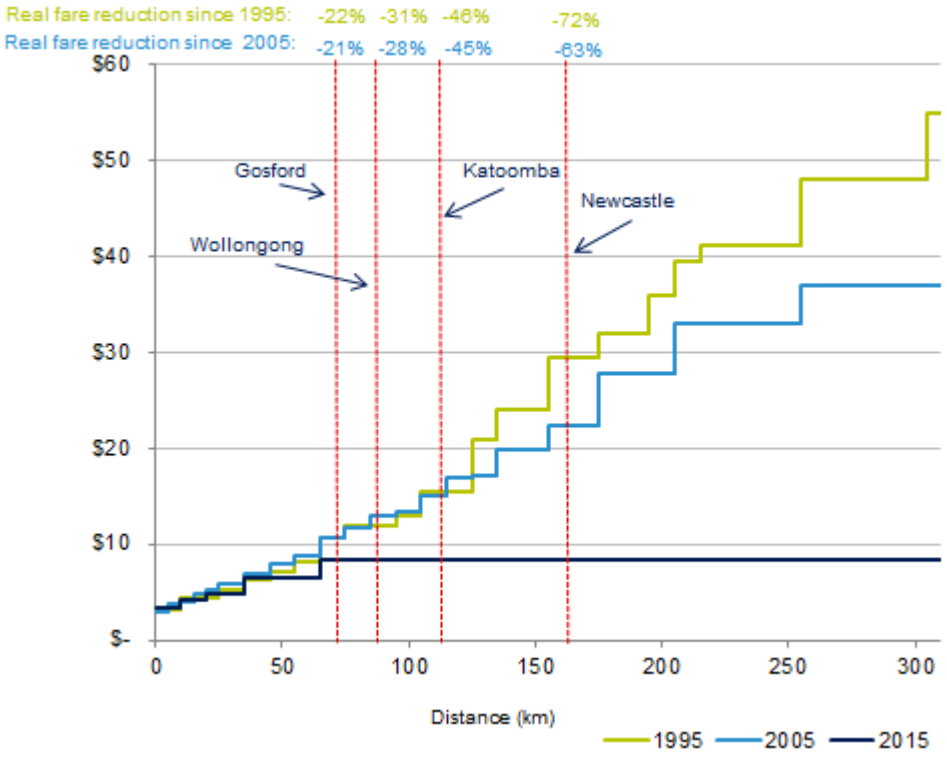
25 Ferry fares across all distances have been comparably stable over time (See Figure 4.3).

26 IPART, *CityRail and Metropolitan and Outer Metropolitan Bus Services: Prices and Services Report 2010,* December 2010, p 6, http://www.ipart.nsw.gov.au/files/6c57b2cd-89c8-4673-821a-9f5f01109d84/FinalReport-CityRailandMetroandOuterMetroBusServices-PricesandServicesReport-December2010.pdf

27 For example, see IPART, CityRail and STA buses and Ferries, Public Transport Fares from 1 July 2002, determination, 24 June 2002, http://www.ipart.nsw.gov.au/Home/Industries/Transport/Reviews/Sydney_Ferries/Review_of_Fares_for_Public_Transport_Services_2002/24_Jun_2002_-_Final_Report_and_Determination/TRANSPORT_-_Review_of_Fares_for_Public_Transport_Services_2002_-_Final_Report

28 IPART, *Report on fares for private buses - From 4 January 2005*, December 2004, http://www.ipart.nsw.gov.au/files/6adc4d0e-1c3e-4f3a-a99d-a0d900ce4209/Final_Report_-_Report_on_Fares_for_Private_Buses_-_From_4_January_2005.pdf

Figure 5.1 Change in train fares by distance for single journeys (real $2015)



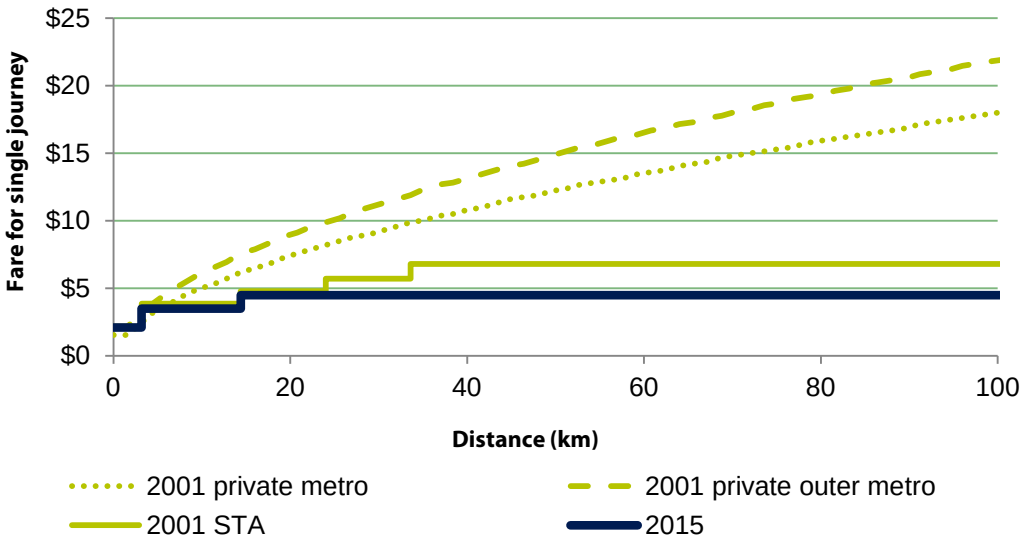
Note: The distance for long distance journeys is measured from the Sydney city stations.

Data source: IPART, Determination Under Section 11 (1) of the Independent Pricing and Regulatory Tribunal Act 1992, http://www.ipart.nsw.gov.au/files/6fc7847d-2b19-448c-be0a-a2ac00e72bb8/Report_on_the_Determination_of_NSW_Public_Transport_Fares_-_CityRail_and_State_Transit_Authority_From_31_August_2003.pdf, NSW Government, "Better Value Fares" in *Opal*, 2015, https://www.opal.com.au/en/fares-and-benefits/fare_information_train/

Chapter 4 explained that under a fully integrated fare, there could be large fare increases for longer distance bus journeys. However, the fares would be relatively similar to what bus passengers paid for this distance of travel in the past. The single Opal bus fare is currently capped at $4.50, the price for 8 km, but until 2001, fares increased up to 34 km in the inner bus region and were capped at $4.40 ($6.80 in today's dollars). In 2009, they were capped at $6.10 (or $7.10 in today's dollars).[29] In outer metropolitan areas, fares increased for distances up to 112 km, and in 2001 the highest fare was $15.70 ($19.17 in today's dollars) (Figure 5.2).

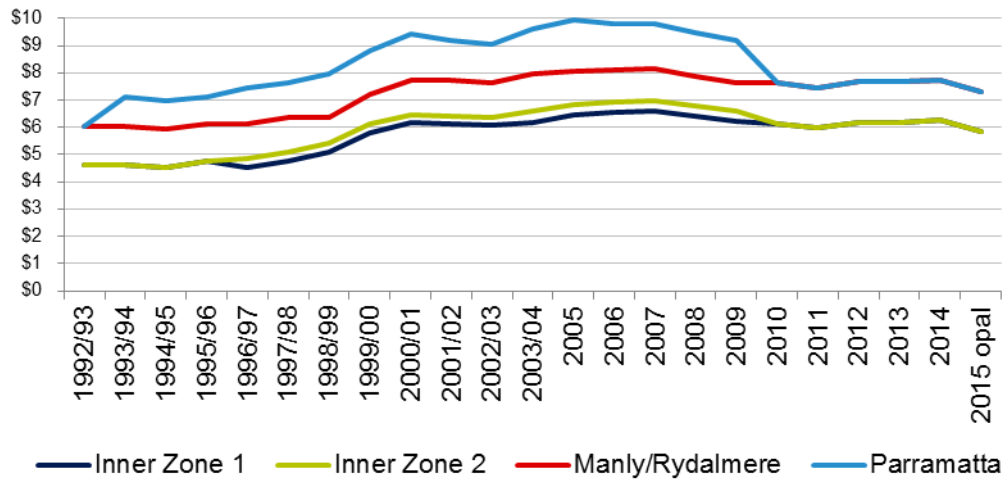
[29] Sydney Metropolitan and Outer Metropolitan Bus Services, Determination No. 7, 2008, December 2008, p 10, http://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/final_report_and_determination_-_review_of_fares_for_metropolitan_and_outer_metropolitan_bus_services_for_2009.pdf.

Figure 5.2 Change in bus fares in inner and outer metropolitan areas over time (real $2015)



Note: In 2001, there were three different fare schedules for buses in Sydney and outer metropolitan regions.
Data source: IPART.

Figure 5.3 Change in Sydney ferry fares over time (real $2015)

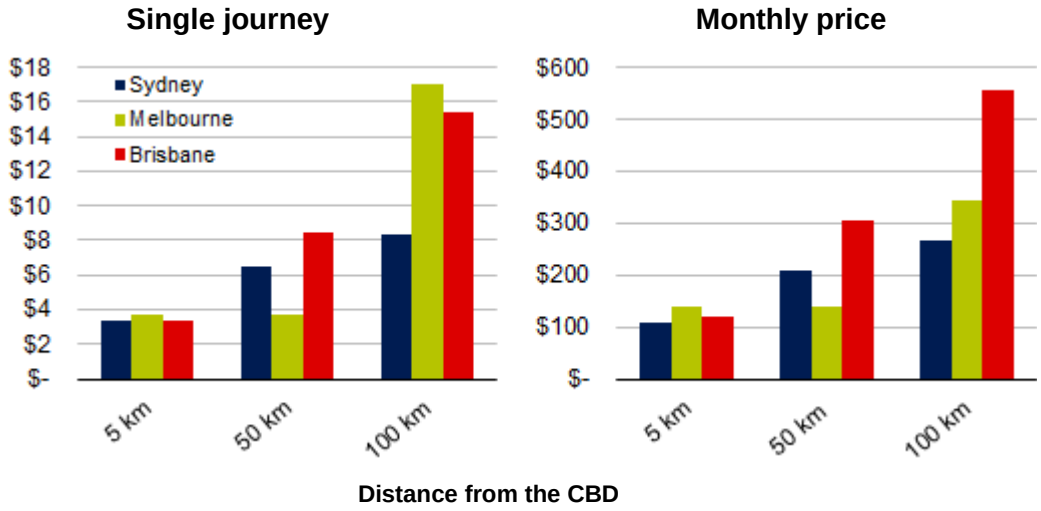


Data source: IPART.

Fares for long distance journeys in Sydney are now substantially lower than in other jurisdictions, particularly for train journeys. For example, Figure 5.4 shows that compared with Sydney:

- Fares in Brisbane are 30% more for a 50 km journey to and from the CBD, and almost double for a 100 km journey.[30]
- Fares in Melbourne for a 50 km journey to and from the CBD are cheaper than in Sydney by around 40%. However, once distances exceed this Melbourne fares are substantially higher than Sydney fares – a 60 km journey in Melbourne is 60% more than in Sydney, and double for a 100 km journey.[31]

Figure 5.4 Long distance rail fares for Australian cities (2015)



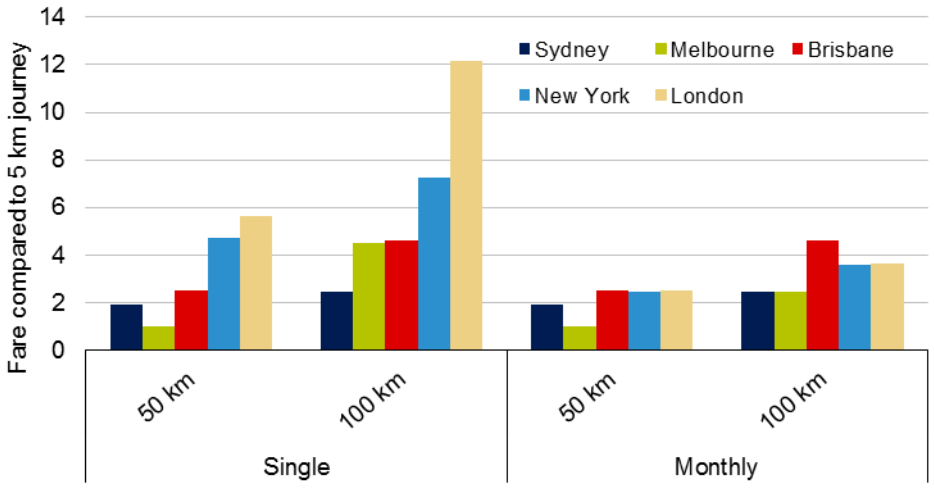
Data source: Public Transport Victoria, Metropolitan myki fares 2015, http://ptv.vic.gov.au/tickets/metropolitan-myki-fares/, Public Transport Victoria, Victorian Fares and Ticketing Manual Effective 1 January 2015, http://ptv.vic.gov.au/assets/Fares-and-Ticketing-Manual-General_ONLINE_2015.pdf, Translink, "South East Queensland" in Current Fares, 2015, http://translink.com.au/tickets-and-fares/fares/current-fares,

Figure 5.5 shows how much more a long distance journey costs compared to a 5 km journey in different cities, including London and New York. In Sydney, a 50 km journey on a train is around twice as much as a 5 km journey. The fare for a 100 km train journey is only 2.5 times as much as a 5 km journey, even though the passenger has travelled 20 times as far. In London and New York, the ratios are much higher – a 100 km train journey in New York is 7 times as much as a 5 km metro journey, and in London it is almost 12 times more expensive.

30 TransLink, "South East Queensland" in *Current Fares,* 2015, http://translink.com.au/tickets-and-fares/fares/current-fares

31 Public Transport Victoria, Metropolitan myki fares 2015, http://ptv.vic.gov.au/tickets/metropolitan-myki-fares/, Public Transport Victoria, Victorian Fares and Ticketing Manual Effective 1 January 2015, http://ptv.vic.gov.au/assets/Fares-and-Ticketing-Manual-General_ONLINE_2015.pdf.

Figure 5.5 Long distance train fare compared to a 5 km journey



Note: A sample of stations are used for New York and London long distance fares.
Source: See Figure 5.4 and Table 5.1.

Table 5.1 Train and metro fares in London and New York (in local currency)

	5 km	50 km	100 km
	Single journeys		
New York	$2.75	$13	$20
London	£2.30	£13	£28
	Monthly fare		
New York	$116.50	$290	$420
London	£123.30	£310	£450

Source: MTA, *Metrocard: Fares at a Glance,* accessed 16 July 2015, http://web.mta.info/nyct/fare/FaresatAGlance.htm, Transport for London, *Adult 2015 fares,* accessed 16 July 2015, https://tfl.gov.uk/cdn/static/cms/documents/tube-dlr-lo-adult-fares.pdf, London Midland, *Buy Rail tickets,* http://tickets.londonmidland.com/lm/en/JourneyPlanning/MixingDeck, South West Trains, http://www.southwesttrains.co.uk/, Thameslink, http://www.thameslinkrailway.com/, MTA, Harlem and Hudson Line Station Fares1 – Effective March 22, 2015, http://web.mta.info/mnr/html/planning/fares/hhfares_mar2015.html, MTA, Long Island Rail Road, http://www.mta.info/lirr.

The reduction in fares in Sydney for long distance journeys, and the fact that fares for similar journeys are much more expensive elsewhere, suggests that these fares have fallen below efficient levels.

Only around 4% of train journeys exceed 65 km (Figure 5.6), however revenue from these journeys exceeds $30 million per year.[32] For many passengers, the benefits they derive from making these journeys on public transport is likely to be greater than what they pay. It is likely that many passengers would be willing to pay at least as much as they had been paying in the past when fares were

[32] Information provided by Transport for NSW for January 2015 fare change compliance, 28 November 2014.

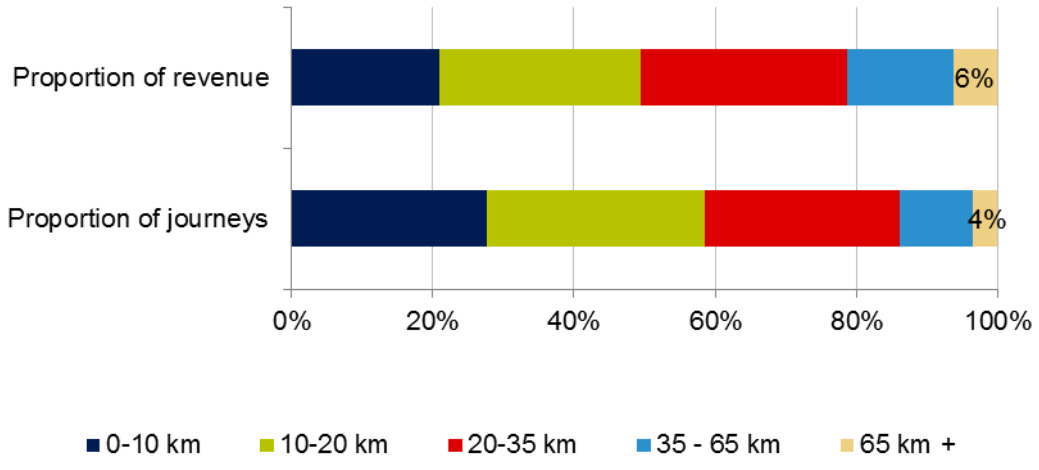
higher. As explained in Chapter 2, increasing the taxpayer funding for these services and reducing the fares needs to be considered against the backdrop of foregone alternatives. It comes at the expense of increased funding for other government services (for example, education or health), or lower fares for other customers.

Setting fares below the efficient level can also make it difficult for private operators to compete, entrenching Government provision and subsidisation of these services.[33]

In deciding what an appropriate balance between fares for long and short distance services is, we will consider the costs and benefits of providing each of these services. This will include analysis on how responsive long distance passengers are likely to be to price, taking into account:

- the change in patronage for long distance services as fares have fallen over time, and
- the likelihood of these passengers switching to making the journey by car instead, taking into account the cost of driving, the duration of the journey, and the levels of car ownership in different parts of the train network.

Figure 5.6 Distance travelled for train journeys (ticket sales data)



Data source: Information provided by Transport for NSW for January 2015 fare change compliance, 28 November 2014.

[33] For example, since the introduction of the direct train from Bathurst to Sydney in 2012, the private coach company has suggested that their revenue for this route has reduced by around 75%. The return fare for the 300 km Government provided train service is set at the same level as 65 km journeys - $15, while the return bus fare is around $80. ABC Central West NSW, *Bus versus 'Bullet' battle heats up*, 18 March 2014, http://www.abc.net.au/local/stories/2014/03/18/3966401.htm, Australia Wide Coaches, *Online Bookings*, https://secure.jbs.com.au/australiawidecoaches/bookings.aspx.

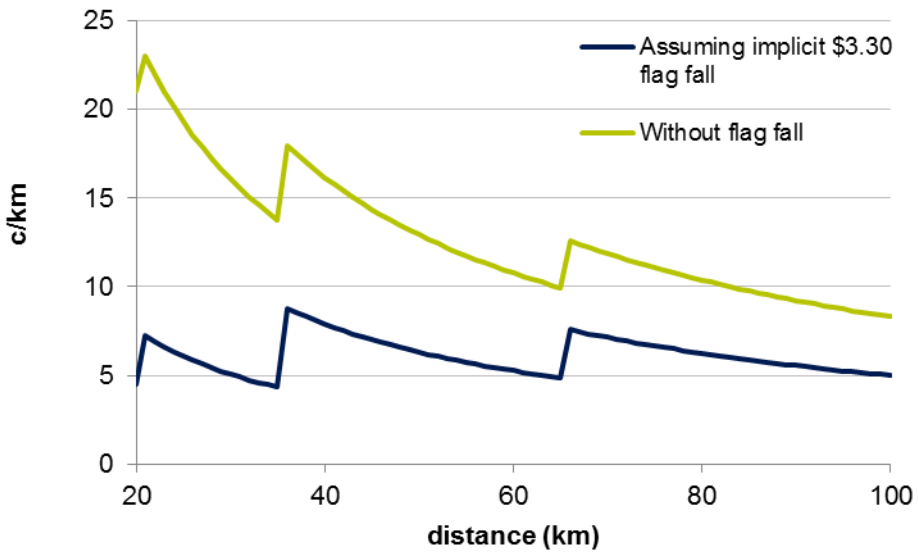
5.2.2 Should distances continue to be grouped into bands?

Under paper ticketing, a distance based fare structure required grouping distances into different fare bands in order to reduce complexity and limit the number of tickets. As explained above, there are fewer fare bands than there used to be.

One of the issues with grouping fares into broad bands is that it produces boundary effects. These are the significant jumps in fare levels that occur when the passenger moves from one distance band into the next. For example, train passengers under Opal currently pay $4.82 for journeys between 20 km and 35 km, but the fare jumps to $6.46 if they travel 36 km. Figure 5.7 shows that this means that passengers who travel distances at the lower end of the distance band pay a higher price per kilometre than those who travel distances at the higher end of the band.

Many passengers use Sydney's train network to travel to the CBD and of these passengers, many reach the train station by driving. The current distance bands provide an unintended incentive for these passengers to drive to a station that falls inside a lower fare band, rather than to their closest station if it just falls into a higher fare band. This can create parking problems at the boundary stations.

Figure 5.7 Rail Opal price per kilometre travelled (2015)

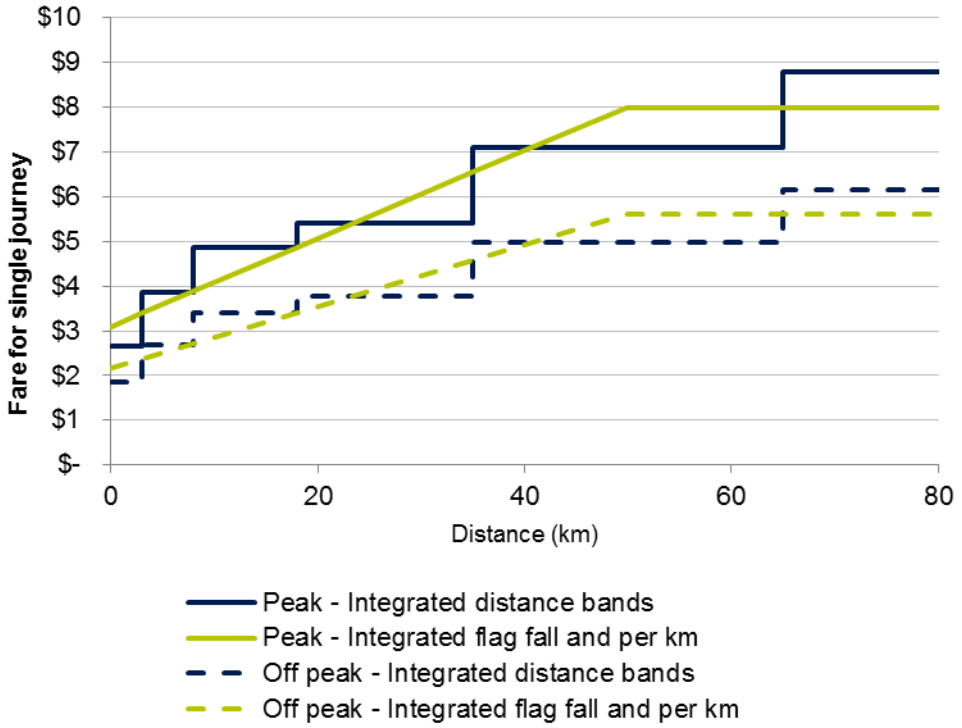


Data source: IPART analysis.

The introduction of electronic ticketing provides an opportunity to remove these boundary effects, because grouping distances into bands is no longer necessary. Instead, a passenger can be charged a flag fall, which is a start fee to use the service, and a per kilometre charge for the distance travelled. The final fare is the sum of these two components.

Figure 5.8 provides an example of an integrated fare with a flag fall and per kilometre charge, rather than grouping distances into fare bands. It shows that prices increase evenly with the distance travelled, with no step changes (consistent with the current Opal fare structure, this example applies a cap for a single train fare). Because the fares increase at a constant rate, it is fairer for customers - everyone pays the same charge per kilometre travelled. It can also encourage more efficient use of the public transport network, as boundary effects are removed.

Figure 5.8 Comparison of integrated fare with flag fall and distance charge, and grouping distances into bands



Note: This example is based on a flag fall of $3.10 and 9.8 cents per km charge in the peak, capped at $8 in the peak.

In our view, the main drawback of a flag fall and per kilometre charge is that there are no discrete fare levels, so passengers will not know their exact total fare before they travel unless they know the exact distance of their route. However, information can be provided (for example at train stations) on the fares for different distances and to different stations to provide an indication of the level of fares that passengers will pay for their particular trip.

A flag fall and per kilometre structure would have different impacts on passengers depending on their current travel patterns. The example shown for an integrated fare in Figure 5.8 above is based on a flag fall of $3.10 and 9.8 cents per km charge in the peak, with a 30% discount in the off peak. Revenue is held approximately constant compared to today's fares. It shows that compared to the example of fully integrated fares in distance bands in Chapter 4, fares for distances under 20 km are generally lower (except for under 2 km), and longer distance journeys are generally lower (except for journeys that fall into the lower portion of the fare bands).

If we decided a flag fall and per kilometre charge structure is the preferred option for our Draft Report, we would also propose a transitional distance-band fare structure to commence in 2016 if necessary. This is because it may take time to configure the Opal technology to calculate fares in that way.

5.2.3 Should changes be made to how trip distance is measured?

As explained in Chapter 2, trip distance is measured differently for train journeys compared to the other modes. With the introduction of the Opal card, journey distance for bus, light rail, and ferry journeys have been measured using the straight line between where the passenger taps on and taps off. However, for train journeys, the trip distance is based on the track distance. In addition, 3.21 km is added to all train trips that run through the Sydney CBD.[34] There is no equivalent to this for the other modes.

As we explain in Chapter 4, if fares are further integrated between modes and a distance-based fare structure is retained, distances will need to be measured consistently across modes. Measuring the actual route travelled is more cost reflective, because it takes into account the actual time and running costs of making the journey. However, it is less equitable, because passengers that don't have a direct route to their destination have to pay more.

If the current rail bands stay the same, many customers will fall into a lower fare band. However, to offset this reduction in farebox revenue, the rail fares for each distance would have to increase.

[34] Transport for NSW, *Sydney Trains and NSW Trains Fares and Ticketing Customer Handbook*, December 2014, p 74.

5.3 Alternative fare structure - flat fares

A flat fare structure is the simplest fare structure because there is only one fare level. A flat fare means that there is no relationship between the fare and the distance travelled: passengers pay the same price for all journeys made within the network.

Moving from a distance based fare structure to a flat fare structure would have either a very substantial customer impact for passengers travelling short distances (for around the same amount of fare revenue), or a very substantial impact on fare revenue (if customer impacts are minimised).

A flat fare structure is used in Adelaide, New York, Rome, London buses, and Melbourne[35]. However, typically the flat fare only applies to trips that are within a certain distance of the CBD. Longer distance rail services generally have a separate fare schedule with fares increasing by distance travelled.

Our analysis suggests that a revenue-neutral flat fare would be around $4 for an "all time fare" that covered the entire network.[36] For a fare structure that has different fares for peak and off peak travel, the fare would be around $4.50 in the peak, and $3.15 in the off-peak. Excluding longer rail journeys would reduce this fare by around:

- 10 to 20 cents less if trips over 65 km are excluded from the flat fare.
- 20 to 50 cents less if trips over 35 km are excluded from the flat fare.

These estimates assume all journeys that are currently made continue to be made under the new fares. However, under each of these options the price for a bus fare less than 3 km increases by more than 60%. Therefore, many of the passengers who make small trips may no longer do so, because of the relatively high price for the distance travelled, even though it would have been efficient for these people to use public transport at a lower fare. However, fares will be cheaper for other passengers, and therefore more of these trips may be made. Depending on which of these two effects is greater, actual fare revenue may be more or less than current revenue.

If a flat fare is applied to all journeys in the Opal network, many more passengers may use more expensive long distance rail services as they are even cheaper to use. In the longer term this might increase the cost of providing public transport and put upward pressure on fares.

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35 In Melbourne there is a cheaper fare available for journeys that begin and end outside of 15 km from the city centre.

36 The network area is 314 km from north to south (from Bomaderry to Newcastle), and 238 km east to west (from Bondi Junction to Bathurst).

This demonstrates that a flat fare structure is the least cost-reflective and least efficient structure, because there is mismatch between price (which is flat) and costs and willingness to pay (which vary with distance):

- it generally costs more to provide a longer distance service than a shorter distance services, and
- passengers travelling longer distances are generally willing to pay more than passengers travelling a shorter distance.

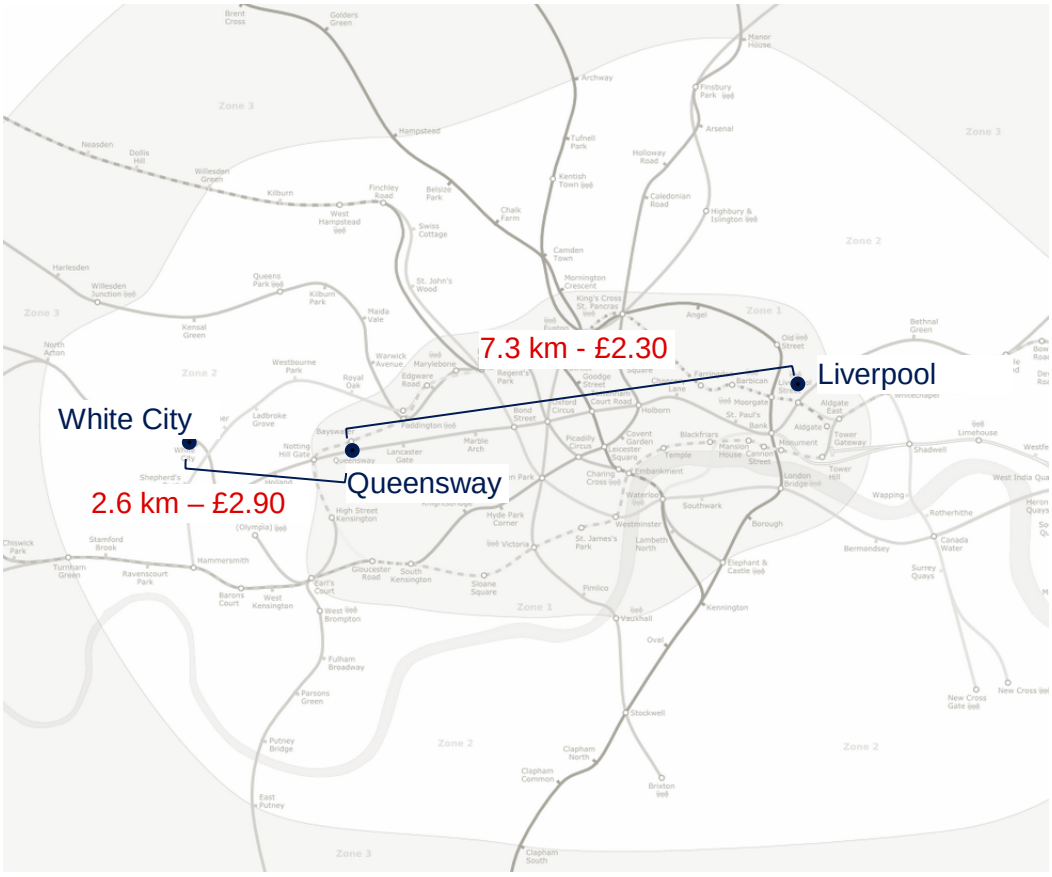
5.4 Alternative fare structure - zonal fares

Chapter 2 explained that rather than have distance bands, Brisbane, and Perth have fixed zones around the city centre, which calculates a fare based on the location of the starting and end point of a journey. This is also common in many other cities, including in London for the Underground, and the Paris rail network.

Some stakeholders have previously argued for zonal fares in Sydney. We have examined them in the past and have noted that a distance based fare structure has more equitable customer impacts than a zonal fare structure, because passengers travelling the same distance always pay the same price.

Under a zonal fare structure, the distance travelled does not always correlate to price. Figure 5.9 illustrates that on the London Underground, passengers making a shorter journey that crosses a zone boundary can pay more than passengers making a longer distance journey within the same zone.

Figure 5.9 London Underground



Data source: Transport for London, *Single Fare finder*, https://tfl.gov.uk/fares-and-payments/fares/single-fare-finder, Generated as part of the London Underground geographic maps project by software written by ed g2s • talk and James D. Forrester utilising GPS data, https://commons.wikimedia.org/wiki/London_Underground_geographic_maps#/media/File:London_Underground_Zone_2.png

We consider that a fare structure based on the distance travelled strikes a better balance between our proposed objectives for this review. In particular, a distance-based fare structure can be efficient and has more equitable customer impacts than either of these alternatives. In addition, the main advantage of zonal fare structures is to allow for an integrated fare using paper ticketing. However, electronic ticketing now allows for fares to be integrated based on distance alone. Therefore, zonal structures no longer offer an advantage over distance-based structures.

IPART seeks comments on the following

5 Sydney currently has a fairly flat distance based structure, with fares not increasing substantially over distance travelled, and not at all beyond the first 65 km for rail trips and 8 km for bus trips. Increasing fares for longer distance journeys would allow fares for shorter distance journeys to be lower. Is this something you would support?

6 A distance based fare structure that is based on kilometres travelled, rather than grouping the distance travelled into bands would remove the fare advantages/ disadvantages that currently apply to people who live or work near fare boundaries. This has the potential to help alleviate problems with parking at some stations and would be more equitable. However, it would also be more difficult for passengers to estimate their fare in advance. Which of these is more important to you?

7 Most cities that have flat fares (that is, a fare that is the same no matter how far you travel) have these fares applying to an inner ring of the city only. Would you support a flat fare in the inner part of Sydney with distance based fares applying outside this zone?

6 How should fares vary by the time of travel?

The time element of fare structures describes if and how fares vary by the time-of-day or day-of-week the journey is undertaken. Generally, this element involves peak and off-peak fares, where peak fares include a surcharge or off-peak fares include a discount compared to the full fare for a single journey.

Currently, an off-peak discount of 30% on full price Opal fares applies to all train journeys taken on weekends, public holidays and before or after the weekday morning and afternoon peaks. These peak periods are:

- 7 am to 9 am and 4 pm to 6.30 pm weekdays for the Sydney Trains network area, and
- 6 am to 8 am and 4 pm 6.30 pm weekdays for the NSW TrainLink network area.[37]

However, there is no difference between fares in peak and off-peak times for other modes.

Under an integrated fare there is a need for consistency between how fares vary by time of day. We propose to consider whether there is still a case for a price differential between peak and off-peak fares, and if there is, how it should apply across modes and what level it should be. The sections below discuss the general rationale for peak and off-peak fares and our preliminary analysis on how well they meet our assessment criteria.

On Sundays, Opal passengers can travel on all modes for a discounted, capped price of $2.50. This cap interacts with the current frequency discounts that apply and is considered in Chapter 7.

[37] Opal website https://www.opal.com.au/en/fares-and-benefits/fare_information_train

6.1 Rationale for peak and off-peak fares

The rationale for a price differential between peak and off-peak fares relates to the higher costs of public transport services in periods of peak demand. The efficient costs of these services are characterised by high infrastructure costs (rail lines, trains, buses, ferries) and relatively low operating costs (electricity, fuel, drivers). Much of the infrastructure is required to meet the demand for services in peak times – for example, to get commuters to and from work on weekday mornings and afternoons. In off-peak times, such as the middle of the day and weekends, the infrastructure may have spare capacity. The external costs of public transport are also higher in peak periods, as the high levels of crowding reduce passenger comfort and create boarding delays that lead to late running services.

A price differential between peak and off-peak times may promote more efficient use of spare capacity and delay the need for expensive investment in infrastructure to meet demand. It may encourage passengers to travel outside of peak times to spread the passenger load and reduce external costs of passenger crowding and boarding delays. It may also encourage passengers who are not current users of public transport to use the network in off-peak times.

6.2 Is there a case for a peak/off-peak price differential?

Our preliminary view is that there remains a strong case for a peak/off-peak price differential for Sydney Trains' services. Like other network businesses, Sydney Trains must design its network capacity to meet peak requirements. Therefore, peak demand is one of the main drivers of its capital and operating costs.

In a previous review of fares for CityRail (now Sydney Trains & NSW TrainLink) services, we found it cost 30% to 50% more to transport a passenger in the morning and afternoon peak periods than in off-peak periods.[38] However, some of this higher internal cost is offset by the higher external benefits generated by the use of train services in peak periods compared with off-peak periods.[39]

Currently, stations in the Sydney CBD are particularly congested and have limited capacity to accommodate more trains in the peak periods. Between 2004 and 2013, the number of passengers travelling by train to and from the CBD across all times of day increased by an average of 27%, compared to an overall patronage increase of 19% across greater Sydney (see Table 6.1).

38 IPART, *Review of CityRail fares, 2009-2012 - Final Report*, 2008, p 127.

39 The external benefits of train travel are higher in peak periods because road congestion is greater, so use of train services in peak periods leads to greater reductions in road congestion. See IPART, *Review of external benefits of public transport – Draft Report*, December 2014, p 37.

Table 6.1 Increase in passenger barrier counts 2004 to 2013

Station	Increase
Central	30.1%
Circular Quay	25.7%
Martin Place	13.9%
Museum	27.9%
Redfern	47.6%
St James	14.7%
Town Hall	31.5%
Wynyard	17.4%
Total CBD	**27.3%**
Total Sydney	**19.1%**

Source: BTS, *Rail Station Barrier Counts 2004-2013*, 2013.

The infrastructure that is required to alleviate this congestion in the long term is very expensive and will take a long time to plan and build. In addition, it may be underutilised in the off-peak. Therefore, in the interim, a peak/off-peak price differential is a good way to alleviate peak congestion and lead to more efficient delivery of services.

6.3 Should the peak/off-peak price differential apply to all modes?

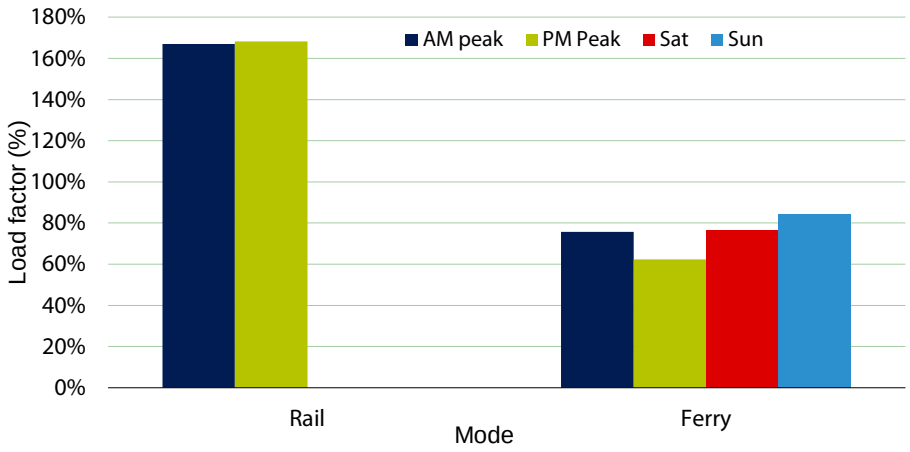
Extending an off-peak discount to other modes would lead to more efficient use and delivery of public transport if those other modes also experience peak congestion that necessitates costly investment. However, it could also lead to a substantial reduction in farebox revenue and cost recovery. Currently around 60% of bus journeys are taken outside the peak so extending an off-peak discount to buses would mean peak fares need to be increased to retain the current level of fare revenue (see Chapter 4).

Recent data on the peak load factors for Sydney's train and ferry services measure how full services currently are in the peak (Figure 6.1). The data indicate that during the weekday morning and afternoon peak rail services have a maximum load of 168% on average across all suburban lines (rail peak capacity is defined as the number of passengers as a percentage of seat capacity).[40] In comparison, the weekday morning and afternoon ferry load factors are lower. The ferry load factors are highest on weekends – an average of 84% on Sundays across all routes, which is an off-peak period for trains.[41]

40 BTS, *Train Peak Loads,* May 2015, train loads in the AM peak and PM peak by line.

41 BTS, *Ferry Load Census May2010 to Nov 2014*, May 2015, maximum load factors for November 2014.

Figure 6.1 Comparison of maximum load factors for rail and ferry (%)



Note: For rail: AM peak = 08:00 to 08:59 at Central, PM peak = 17:00 to 17:59 at Central, suburban lines only (excluding intercity). For ferries: AM Peak = arriving at Circular Quay/Darling Harbour at 7:01 to 9:00am, PM Peak = departing from Circular Quay/Darling Harbour at 16:31 to 19:00, Saturday and Sunday load factors are for outbound journeys, which are the highest.

Data source: BTS, *Train Peak Loads*, May 2015; BTS, *Ferry Load Census May2010 to Nov 2014,* May 2015.

Data on peak load factors for buses or light rail is not publicly available at this stage. However, our preliminary view is that the efficiency gains from a peak/off-peak price differential are likely to be a lot lower for buses than they are for rail. This is because:

- There are differences in the way people tend to use the rail and bus networks. Because the rail system tends to converge on the CBD, it is predominantly used by commuters travelling to and from work during the weekday peak periods. The bus network is more dispersed, so people use it for a wider range of purposes. This may mean that peak congestion is not as high for buses as for rail.
- The Government can respond to peak congestion on buses by increasing service frequency or investing in more buses. This response is less costly and requires less lead time than increasing the supply of train services.

Our preliminary view is that there are strong efficiency arguments for retaining the peak/off-peak price differential for rail services. However, there is currently limited evidence to suggest many gains from extending it to other modes.

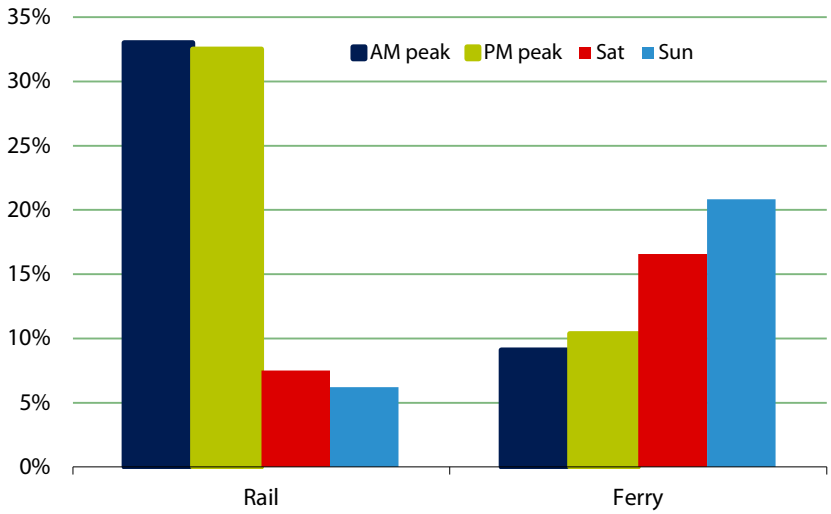
Providing time-of-use price signals to other modes that do not match their peak and off-peak times may actually reduce efficiency. Information on demand for rail and ferry services shows substantial differences between the peak periods of these two modes. As Figure 6.2 shows:

- For rail, more than 60% of all weekly journeys occur during the morning and afternoon peak periods, and not much more than 10% occur on the weekends.

- For ferries, this situation is reversed, with 38% of all weekly journeys taking place on weekends, compared with only 19% during weekday mornings and afternoons.

In fact, the busiest day for ferry services is Sundays, when 21% of all weekly journeys are taken.[42] This has increased from 12% of journeys in 2010.[43] One of the factors that may have contributed to this growth is the introduction of the Opal $2.50 capped Sunday fare. Another contributing factor may be the Opal Weekly Travel Reward. These are discussed further in Chapter 7.

Figure 6.2 Proportion of weekly journeys at different times (%)



Note: For rail: AM peak = before 9:30am, PM peak = 15:00 to 18:30. For ferries: AM Peak = arriving at Circular Quay/Darling Harbour at 7:01 to 9:00am, PM Peak = departing from Circular Quay/Darling Harbour at 16:31 to 19:00, average of total inbound and outbound journeys across all routes in November 2014.

Data source: BTS, *Rail Station Barrier Count*, 2013 as referenced in BTS, *Summary of train statistics report – 2014*, May 2015; BTS, *Ferry Load Census May 2010 to Nov 2014*, May 2015.

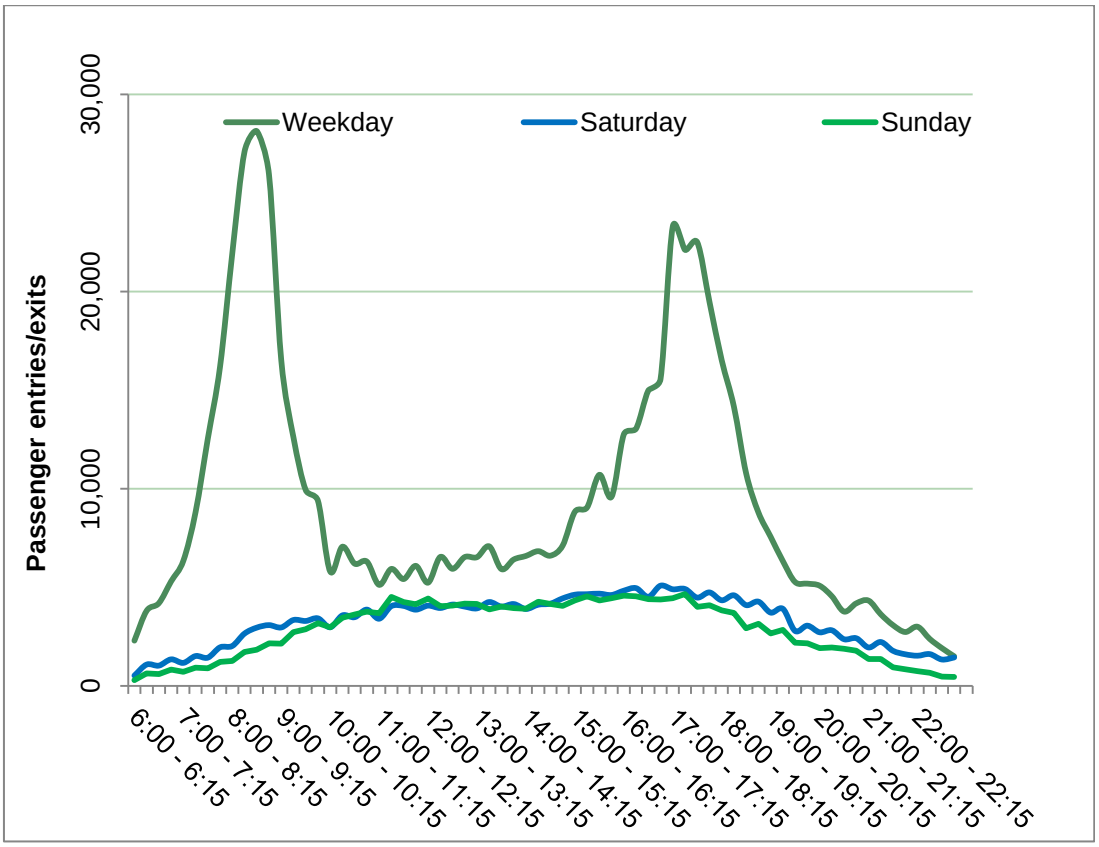
6.4 Should the price differential be location- or direction-specific?

Peaks are generally limited to travel in one direction – towards the CBD in the mornings and away from the CBD in the evenings. CBD train stations, specifically Central, Town Hall and Wynyard, are the busiest in NSW. As Figure 6.3 shows, they are most busy during the weekday morning and afternoon peaks.

42 BTS, *Train Statistics 2014 Report*, May 2015; BTS, *Ferry Load Census - May 2010 to November 2014*, May 2015.

43 BTS, *Ferry Load Census - May 2010 to November 2014*, May 2015.

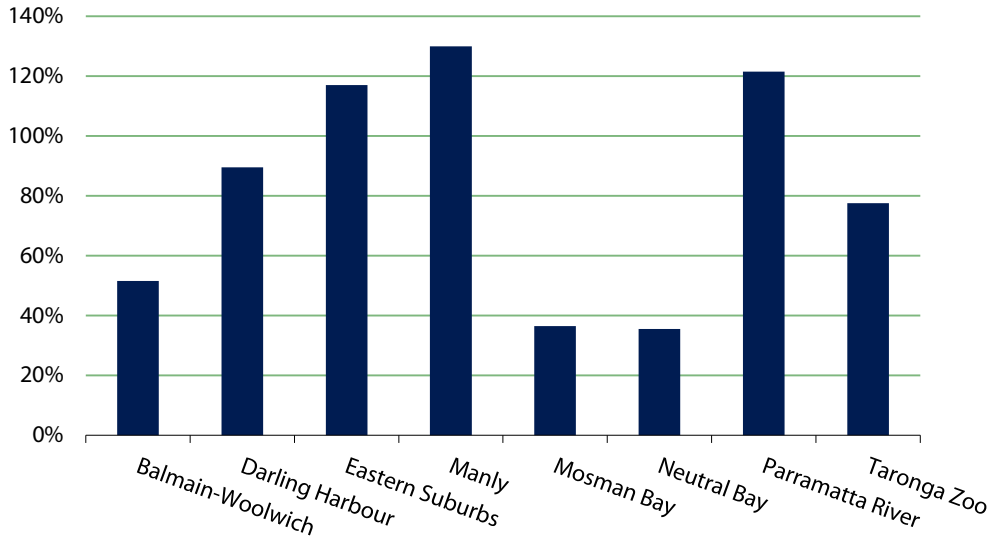
Figure 6.3 Distribution of CBD station entry and exit by time of day and day of week



Data source: BTS, *Train Statistics 2014 Report*, May 2015, p 49.

Peaks may also occur only on specific routes. For example, Figure 6.4 shows how load factors vary between ferry routes on Sundays.

Figure 6.4 Ferry load factors on Sunday by route (%)



Note: Based on average maximum load factors across all routes, inbound and outbound. AM peak is 7:01 to 9:00am and PM peak is 16:31 to 19:00.

Data source: BTS, *Ferry Load Census - May 2004 to November 2014*, May 2015.

Rather than having a uniform peak/off-peak price differential under an integrated fare, an alternative solution may be to have a surcharge that applies to arrivals and exits at specific station or wharf to target station/wharf crowding. For example, a peak price that applies to arrivals at any CBD railway station during the morning peak and exits during the afternoon peak or a surcharge that applies to selected wharfs in the case of ferries.

This could lead to more efficient use of public transport because it would directly target the most congested areas at the most congested times, without influencing passengers' travel behaviour on lines that are not congested or those travelling in the other direction. It would minimise impacts on customers and minimise farebox revenue impact, by narrowing the number of passengers affected. However, while this could operate under integrated fares, it is more complex than the current peak/off-peak price differential for passengers.

6.5 Are the current peak and off-peak times appropriate?

As discussed above, the largest efficiency and revenue changes are likely to result from a peak/off-peak fare differential for rail. While the broader peak periods for rail may be 6 am to 9:30 am and 3 pm to 6:30 pm weekdays, 52% of morning peak train travel happens between 8:00 am and 8:59 am and 42% of afternoon peak train travel happens between 5:00 pm and 5:59 pm.[44] These periods may be considered the 'super-peak' periods.

[44] BTS, *Train Statistics Report 2014*, May 2015, 5.1 morning peak period and 5.2 afternoon peak period, average across all lines.

In 2012, Douglas Economics undertook a study for Infrastructure NSW to model the relative ability of fare discounts and fare surcharges to spread peak passenger loads more evenly across the morning peak.[45] Douglas Economics found that passengers were more reluctant to pay a surcharge than to accept an off-peak discount and estimated that surcharges are three times more effective than discounts in getting passengers to shift their time of travel.[46]

However, applying a narrow super peak surcharge may not actually result in significant efficiency gains if it serves mainly to shift travel into other parts of the peak or onto other modes, causing them to become overcrowded. Unless it is also combined with an off-peak discount, such an approach also would not encourage greater use of public transport at times of day where there is significant spare capacity.

Douglas Economics also found that passengers valued travelling an hour earlier than desired the same as spending an extra 32 minutes on the train. But they valued travelling an hour later than desired the same as spending an extra 56 minutes on the train.[47] This suggests a price differential that encourages passengers to shift their travel to an earlier time is likely to be more successful than encouraging them to shift travel to a later time.

6.6 How likely are passengers to switch their travel time?

There are also a number of factors other than price that may make passengers reluctant to shift their travel to out of peak even if they face a significant price incentive to do so. These include:

- lower frequency of services in off-peak periods
- lack of parking spaces at park and ride facilities after the early morning
- lack of flexibility in working hours, and
- the value the passenger places on their travel time.

In addition, many passengers who travel in the peak may be unable to shift their travel to another time. For a large majority of rail passengers traveling in the morning and afternoon peak periods the purpose of the travel is work, work-related or education (Table 6.2).

45 The model was developed in 2010 using timetable and patronage data for the Illawarra line. The demand parameters were based on market research where passengers were presented with a series of paired journey choices and asked by interviewers which of the pair of train services they would use in each situation. The forecasts for the Illawarra line were used to derive patronage and revenue estimates for the CBD as a whole.

46 Douglas Economics, p 11.

47 Ibid, p 3.

Table 6.2 Purpose of travel for rail passengers (%)

Trip purpose	AM peak	PM peak	Off-peak
Work	62%	47%	21%
Work related	5%	4%	5%
Education	21%	17%	5%
Shopping	4%	8%	16%
Personal business	2%	3%	5%
Social recreation	5%	14%	42%
Serve passenger	1%	5%	4%
Other	0%	1%	2%

Source: BTS, *Train Statistics 2014 Report*, May 2015.

IPART seeks comments on the following

8 We consider that there is value in discounting fares in off-peak periods. Currently this is done only on the rail network. Do you think that an off-peak discount should apply to other modes as well? Would you support this even if it means that peak fares for these modes need to rise?

9 Currently peak fares for trains apply between the hours of 7 am and 9 am (6 am to 8 am for NSW Train Link services) and between 4 pm and 6.30 pm, Monday to Friday with off-peak fares applying for trips where tap on occurs outside these hours. Should the definition of 'peak' times be longer or shorter? Are these times also the peak times for buses, ferries and light rail services?

10 Do you see value in having peak fares apply only in one direction or being replaced with a peak surcharge for journeys that enter the CBD in the morning and exit the CBD in the evening?

11 Would you support fares being more expensive in the peak and cheaper in the off-peak? If they were, would you be more likely to change your travel patterns earlier or later to avoid the higher fares? Why or why not?

7 What discounts should apply for frequent travel?

The frequency element of fare structure describes if and how fare discounts or caps apply after a certain number of journeys have been paid for within a defined period. Currently, Opal offers passengers several frequency discounts, including:

- The Weekly Travel Reward – after eight paid journeys from Monday to Sunday with an Opal card passengers get free travel for the rest of the week.
- Daily and weekly fare caps – after $15 in fares have been paid with an Opal card in a day (or $60 in a week) passengers get free travel for the rest of the day (or week).[48]

On Sundays, Opal passengers can travel on all modes for a discounted, capped price of $2.50. This cap also interacts with the frequency discounts that apply.

These discounts apply across modes, so both the journeys passengers pay for and the free journeys they take can be on any mode. In addition, the free trips can be taken in both peak and off-peak periods. This means the discounts interact with other elements of the fare structure. In particular, they increase the level of fare integration across modes for frequent passengers (discussed in Chapter 4). They also dampen the price incentives for rail passengers who don't need to travel in the peak periods to shift their travel to the off peak (discussed in Chapter 8).

We propose to consider both the Weekly Travel Reward and the daily and weekly fare caps, and the way they interact with the price incentives for off-peak travel. The sections below discuss these discounts and how effective they are in providing efficiency benefits and how equitable they are. It also outlines an alternative approach that may increase the benefits of these discounts.

48 Opal website https://www.opal.com.au accessed 16 July 2015

7.1 Rationale for frequency discounts

Most cities offer some form of frequency discount on public transport. Some of the reasons for providing frequency discounts are:

- **Provide efficiency benefits.** By reducing the price of travel for passengers who use the system often, frequency discounts encourage those passengers to make additional trips by public transport that they otherwise would not have made. This could improve cost recovery if they are paying at least as much for those trips as it costs to provide them as well as generating positive external benefits by encouraging people to use public transport rather than drive (eg, by reducing road congestion). It could also improve network efficiency, provided the additional trips are made on services with spare capacity.
- **Increase fare simplicity and affordability for passengers.** Frequency discounts can provide certainty about the maximum amount passengers will pay in a period when fares for individual trips vary by mode and distance travelled. By reducing the total price for those who use the system often, they also make public transport more affordable for these passengers.
- **Encourage a minimum weekly spend on public transport.** By encouraging people to make at least a certain level of financial contribution every week, the frequency discount acts like a two-part tariff where passengers contribute towards the provision of capacity on a weekly basis and in return are able to make additional trips at a discounted rate.

In the past, the frequency discounts were applied to the price of periodical paper tickets to reduce queuing at stations and the Government's ticketing costs. However, the introduction of Opal has addressed these issues.

7.2 Effectiveness of current frequency discounts in providing efficiency benefits

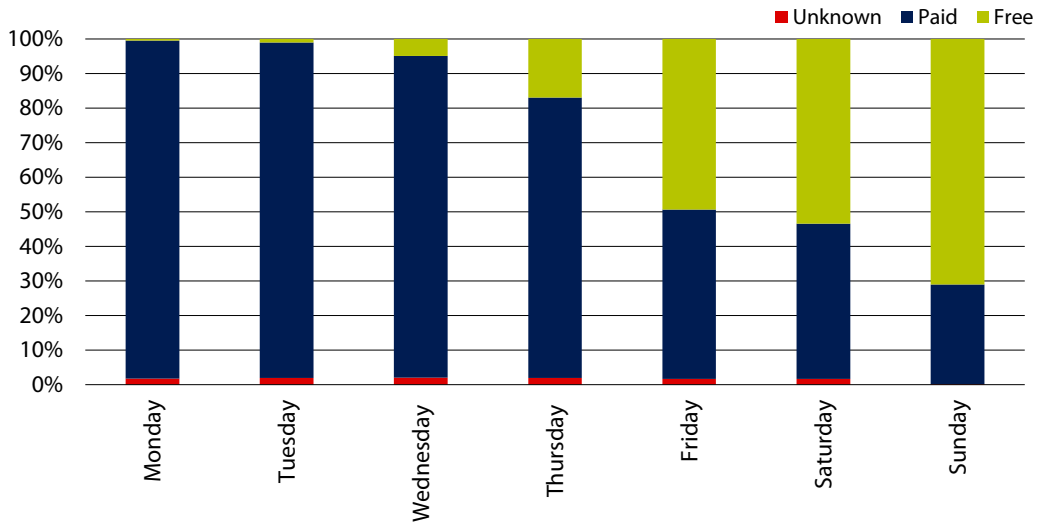
As discussed above, frequency discounts can provide efficiency benefits by encouraging greater use of the network. However, they may also have unintended consequences if they also increase demand for services that are reaching capacity. The efficiency benefits will be maximised where they encourage people to use public transport for trips where they would otherwise have driven and to make those trips at times and on modes that are not already crowded.

7.2.1 Do the current discounts encourage greater use of public transport?

While there is no data to show that discounts encourage greater use of the Opal network, there is data showing that a number of people do benefit from the frequency discount. As Figure 7.1 shows, the proportion of free trips taken on Opal begins to increase from around Wednesday, reaches about half of all trips by Friday, and more than half of all trips on Saturday and Sunday. However, it is likely that some of the free trips taken on weekdays are not additional travel. For example, some of them are probably trips for work, work-related or education purposes that would have been taken even if they were not free.

On the other hand, there are still substantial proportions of paid trips on the weekend. This suggests that a large number of off-peak users are not receiving frequency discounts on Fridays and Saturdays but are choosing to travel by public transport anyway. As a lower daily cap of $2.50 applies on Sundays, paid journeys on Sundays are limited to the first trip made.

Figure 7.1 Proportion of Opal trips paid for and free, by day of week (%)



Note: Based on data for four weeks in March 2015. 'Free' includes all free trips not just those that are free as a result of the frequency discounts (for example, it includes free trips made using Opal Gold).

Data source: Information provided by Transport for NSW.

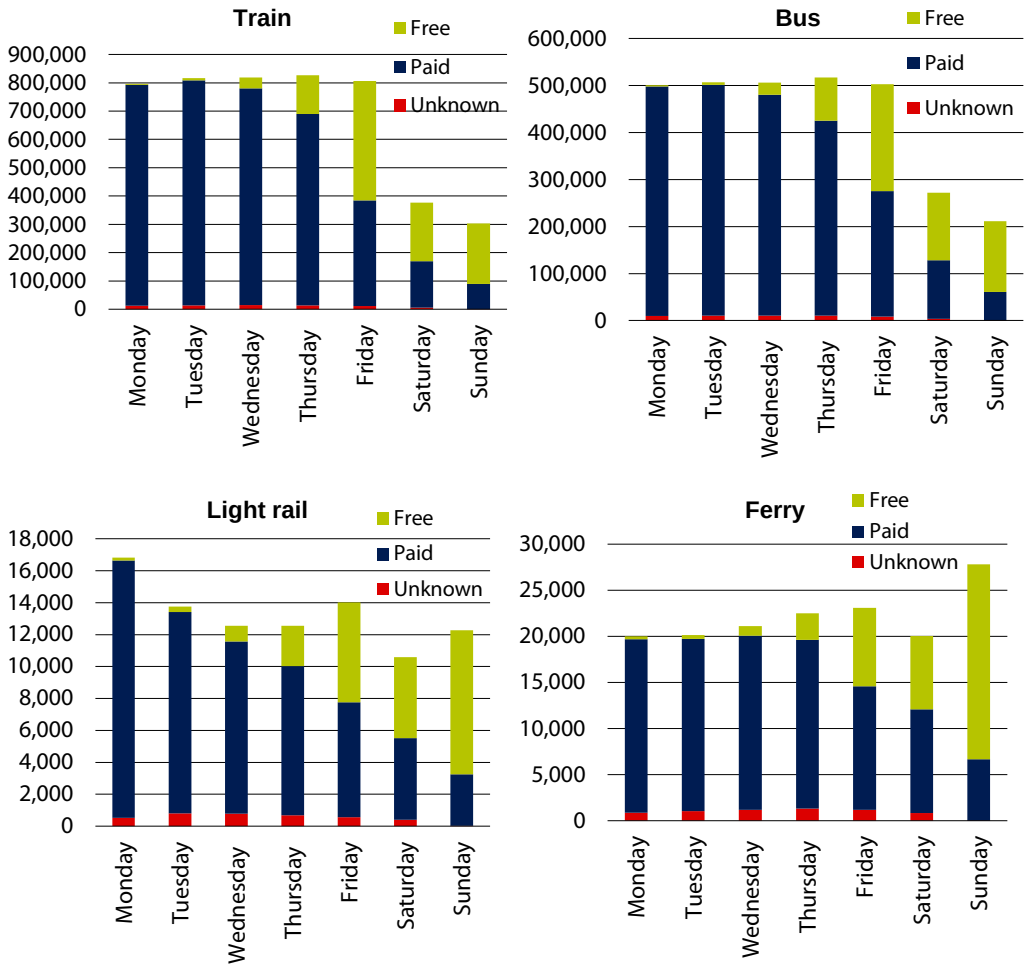
7.2.2 Do the current frequency discounts encourage additional travel at times and on modes where there is spare capacity?

The current frequency discounts may not encourage frequent travellers to take additional trips at times when there is spare capacity. As discussed above, currently around half of all Opal trips taken on Fridays are free trips (Figure 7.1). If free travel on Friday encourages frequent travellers to travel in the peak when they would normally avoid this time, then there may be a case for changes to address this.

In addition, the current frequency discounts may not encourage frequent travellers to take additional trips on modes where there is spare capacity. Figure 7.2 shows the number of paid and free trips across the week by mode. For trains and buses, the total number of trips made on Saturdays and Sundays is substantially lower than the number made on weekdays. This suggests that any additional trips encouraged by the frequency discounts do not add significantly to the costs of providing services. To a lesser extent this is also true for light rail.

However for ferries, more trips are made on weekends, particularly on Sundays, than are made during the week. Ferry services have a higher proportion of tourist journeys and a much lower proportion of commuter journeys than buses and trains. This is likely to create this pattern of demand across the week even without additional weekend fare discounts. However, it also means that the free trips contribute to peak demand for these services.

Figure 7.2 Paid and free trips by day of the week (Opal only)



Note: Based on data for four weeks in March 2015. 'Free' includes all free trips not just those that are free as a result of the frequency discounts (for example, it includes free trips made using Opal Gold).

Data source: Information provided by Transport for NSW.

7.2.3 What are the cost implications of the current discounting structure?

The recent increase in demand for ferry services on weekends has necessitated investment in new ferries and services to meet demand and ease crowding. The Government has committed to:

- adding extra services along the Parramatta River on Sundays (when demand is at its highest)[49]
- purchasing six new ferries to service the inner harbour from 2016,[50] and
- more than doubling the number of services between Circular Quay and Manly on weekends to transport more passengers and ease crowding.[51]

Pricing to encourage additional travel beyond the current capacity of a service is not an efficient outcome. Introducing restrictions on using free trips on Sundays, or requiring a nominal charge for using ferry services on a Sunday, would help reduce the cost of the current discounting structure.

Even where trips are made on services with spare capacity, if those trips are not paid for at all, the benefits of increasing utilisation of those services are largely private benefits for the people using the service. Additional benefits may be small, as they are limited to the external benefits of those trips[52] less the cost of carrying those additional passengers. Alternatively, a low fare, or low daily cap, for trips made on services with spare capacity would increase cost recovery, which would enable lower fares and/or improved services.

7.3 Effectiveness of current frequency discounts in improving fare simplicity and affordability for passengers

Frequency discounts can also improve the simplicity and affordability of fares for passengers. For example, they provide certainty about the maximum amount passengers will pay for public transport in a week or a day. And, they reduce the cost of public transport for those who use the system often, making it more affordable for these passengers. However, they can also have unintended consequences. For example, the discounts themselves may not be simple and easy enough to understand. They may also lead to inequitable outcomes across passengers.

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49 Minister for Transport Media Release, *Sydney's Ferry Future: new vessels, new wharves and more services* http://www.transport.nsw.gov.au/sites/default/files/b2b/releases/130522-sydneys-ferry-future.pdf accessed 16 July 2015.

50 NSW Government News, Sydney ferries receive a major upgrade, 4 April 2014 https://www.nsw.gov.au/news/sydney-ferries-receive-major-upgrade accessed 16 July 2015.

51 Transport for NSW, *Cheaper fares, more services and new vessels for Many Fast Ferry customers* http://www.transport.nsw.gov.au/media-releases/cheaper-fares-more-services-and-new-vessels-manly-fast-ferry-customers accessed 16 July 2015.

52 For example, in our recent review of external benefits we found that the greatest benefit from public transport use was reduced traffic congestion. At times of low traffic congestion this benefit is likely to be fairly low.

7.3.1 Could the current frequency discounts be simpler and easier to understand?

As discussed above, there are currently several frequency discounts for Opal passengers, including

- the Weekly Travel Reward (free trips after the eight paid journeys), and
- both daily and weekly fare caps ($15 and $60 respectively).

It might be simpler and easier for people to understand if a single form of frequency discount was in place. However, it is not clear which of the current forms of discount is better as they both have advantages and disadvantages. For example:

- Daily and weekly caps are better at providing certainty to passengers who would otherwise pay different fares for different modes used and distances travelled. However, the benefit of this would not be as significant if there were a higher level of integration across modes (discussed in Chapter 4) because this would already provide more simplicity and certainty about fares.
- Weekly Travel Reward with free trips after the first eight may be better at encouraging people to use the network at times where there is spare capacity (eg, on rail and bus services over the weekend). But they also provide greater incentives for people to alter their travel behaviour so that they pay for cheaper trips and then use their free trips to make more expensive journeys (weekly caps provide less incentive to do this, as they require a minimum weekly spend). (The potential for this behaviour is discussed further in section 7.3.3 below.)

In terms of reducing the price of public transport and improving affordability for frequent travellers, which approach is better depends on the mode and distance travelled (see section 7.3.2 below).

7.3.2 Do the current frequency discounts have equitable outcomes for passengers?

Daily and weekly caps are more likely to reduce the fares paid by long distance rail commuters than any other type of passenger. The current caps reduce the fares payable for a return trip to the City from the Central Coast five days a week by just under 30% (any additional public transport use increases this saving).[53]

[53] The full Opal fare for a return trip to the central coast is $83.00 (the single fare of $8.30 times ten) https://www.opal.com.au/en/fares-and-benefits/fare_information_train/. Under the current daily cap, any return journey made on any day of the week attracts a discount, even if that two-way journey is the only public transport trip made.

Passengers who commute shorter distances by rail or other modes are unlikely to receive any discount from the daily or weekly caps. However, if they travel to and from work every day for five days, the Weekly Travel Reward will reduce the fares payable by around 20%.[54]

Regular but less frequent users, such as part-time workers, are unlikely to qualify for either the Weekly Travel Reward or the daily or weekly caps unless they take a relatively high number of discretionary trips or make long-distance rail trips.

7.3.3 What incentives do the current frequency discounts create?

While the Weekly Travel Reward has some efficiency and equity advantages over the daily and weekly caps, passengers who need to make more expensive trips could adjust their travel behaviour so that they pay for cheaper trips and receive their usual more expensive trips for free.

Several media articles have suggested ways for passengers to maximise the benefits they receive from the Weekly Travel Reward. One example is to walk between relatively close light rail stations (unlike buses you are able to tap on and off at light rail stations without using the service).[55] The article reports that it is possible to pay for eight trips in one day for a total cost of $15 (the daily cap) and then travel for free for the rest of the week. The extent to which this is actually happening is unknown, but the sample of information we have been provided with shows that unlike all of the other modes, paid trips on light rail are substantially higher at the beginning of the week (Figure 7.2).

This type of behaviour has the potential to save significant amounts of money for passengers who make regular long-distance rail journeys. A five-day a week commuter travelling over 65 kilometres could save $45 a week in fares (or $70 if there was no weekly cap in place).

7.4 What alternative frequency discounts could address the issues with the current approach?

Of the issues with the current frequency discounts discussed above, we consider the following are worth further consideration:

- not receiving any network benefits from encouraging additional travel outside peak periods
- the reduction in incentives to shift travel from peak periods and from modes when capacity is constrained, and

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54 Anyone making 10 trips per week to and from work on the train will receive the last two of those trips for free under the Weekly Travel Reward, reducing the price of their travel by 20% www.opal.com.au.

55 For example, see OzBargain, *Opal Weekly Reward in One Day for $15* https://www.ozbargain.com.au/node/185554

- the scope for using the Weekly Travel Reward to make more expensive long-distance peak trips for free.

One option that would address all of these problems is to replace the current Weekly Travel Reward with substantially cheaper travel on weekends and/or late night services for all passengers with an Opal card. For example, a low daily cap (say, $2.50) could be applied on Saturdays as well as Sundays, or half-fares charged for all journeys made on public transport over the weekend and overnight between 6.30 pm and 6.00 am on weekdays. These measures could be combined with different weekday caps and/or weekly caps or be applied alone.

It would make sense to extend these discounted fares only to services where there is spare capacity so that any additional demand does not result in the need for costly new investments, as has occurred for ferry services under current fares. This may mean ferry services should be excluded from weekend discounts, or subject to a surcharge.

This approach would mean that the Government still collects fare revenue from people who travel at these times, which goes some way to off-set running costs. It also means that travel discounts would be available to a broader range of users who are unlikely to receive the current frequency discounts (including part-time workers and students).

An alternative to discourage passengers from using their free trips in the more expensive peak periods would be to retain the Weekly Travel Reward but make it available after nine or ten paid trips instead of eight. This way, regular train commuters would still have a price incentive to avoid the morning peak on Fridays, as the peak fare would apply. The weekday morning peak period is when rail services in particular are at their most crowded. Travel in the evening peak is more spread out, so services in this time tend to be less crowded.[56] However, this option would only work where passengers do not make more than eight trips from Monday to Thursday.

Another option is to restrict the use of free trips to off-peak periods and continue to charge full fares for any peak trips made.

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56 See Parry, T, *Ministerial Inquiry into sustainable transport in New South Wales – A framework for the future*, December 2003, p 66.

IPART seeks comments on the following

12 Do you receive any benefit from the current weekly and daily caps? Do you receive any benefit from the weekly travel reward? How fair do you think the current discounts are?

13 Does the weekly travel reward (free trips after you pay for the first eight journeys) encourage you to use more public transport than you would otherwise? Are you more likely to make shorter bus or light rail journeys early in the week in order to access the discount sooner?

14 Would you support discounted fares on more services (eg, a $2.50 daily cap for rail, bus and light rail travel on Saturdays and Sundays) if that meant that you were unable to use free trips during peak times?

8 Do concession arrangements support optimal use of the public transport network?

The final element of fare structure we will look at is the user element, which describes if and how fares vary by customer characteristics, such as age and eligibility for concession fares. In general, concession fare arrangements are a matter for the Government and so fall outside the scope of IPART's fare reviews. However, for this review, we have been asked to consider "whether current concession arrangements support the optimal use of the network". We have interpreted this to mean primarily whether these arrangements provide sufficient incentive for concession users who have flexibility about when they travel to shift this travel to outside peak periods.

The sections below outline the incentives for peak and off-peak travel under the current concession arrangements, and then discuss whether there should be greater incentives for concession users to travel outside peak periods and the options we could consider.

8.1 Concession arrangements for peak and off-peak travel

In general, concession arrangements make travel more affordable and attractive for certain groups of people. This creates both private and external benefits. The private benefits for passengers include the benefits they receive from travelling more. The external benefits for society more generally include providing greater means for people to be involved in society, and to access services, healthcare and jobs. There are also efficiency benefits from offering lower fares to people with less ability to pay for travel as it means people who would not otherwise use public transport can afford to do so. However, these efficiency benefits only exist where the additional travel that results from lower fares occurs outside the busy peak periods.

Currently, several concession Opal cards are available to NSW residents, including:[57]

- **Gold Opal,** which is available to Seniors Card holders, Pensioner Concession card holders and NSW War Widow/ers. This card caps fares at $2.50 a day, and provides half-fare concessions for users who don't reach the daily cap.

[57] Opal website www.opal.com.au.

- **Concession Opal and Child/Youth Opal,** which are available to tertiary students, job seekers (defined as receiving the maximum rate of a range of Centrelink benefits) and children (defined as aged 4 to 15). For both these cards, fares are calculated as half the equivalent Adult Opal fare, and are capped at $7.50 a day and $30 a week, half of the Opal Adult fare caps.

In addition, free travel is available to passengers who are children under 4, WWI veterans and widows, vision-impaired people, companions travelling with certain groups of people who require attendants to use public transport, and children under 16 who are travelling as part of a family provided all adult family members and at least one child hold a valid ticket.

Because free travel is available to a tightly defined group of people, the numbers of passengers using this concession are likely to be insignificant. Therefore, we will focus our review on fares for the Opal Gold, Opal Concession and Opal Child/Youth card users. The incentives these cards create for users to travel outside of peak periods if they are able to do so varies.

Gold Opal currently provides no incentive for users to travel outside peak periods, because the daily fare cap is so low. Significant numbers of people travel on this card every day. In contrast, the Opal Concession and Opal Child/Youth provide the same incentives as the Adult Opal card. That is, for rail travel, fares up to the daily and weekly caps attract the same 30% off-peak discount as the Adult Opal fare. For the other modes of travel, there is no is incentive for users to travel outside peak periods.

8.2 Should there be greater incentives for concession users to travel outside the peak if they can?

In peak times, particularly in the weekday morning peak where demand is less spread out, passengers experience much higher levels of crowding. Once crowding reaches a particular point, it creates a need for additional investment in infrastructure. This raises the cost of providing public transport, and puts upward pressure on fares.

If successful, encouraging passengers who have a choice about when they travel from peak to off-peak periods improves the travel experiences for those who must travel in the peak. It also increases the efficiency of the network by delaying or avoiding additional infrastructure investments, and increases utilisation of services in quieter times when there is spare capacity.

For these reasons, there have previously been calls to limit the availability of concession fares in peak periods. For example:

- The Institute of Transport and Logistics Studies (ITLS) at the University of Sydney argued there would be benefits from limiting non-workers' access to concessions in peak periods. The ITLS also argued that 'we should be clear about why non-workers' concessions are offered and the impact this might have on usage of the public transport system.'[58]
- The Ministerial Inquiry into sustainable transport in NSW (the Parry Inquiry) recommended that the Pensioner Excursion Ticket (a paper ticket that has the same eligibility and conditions as the Gold Opal) should not be able to be used in the morning peak (before 9 am), and instead passengers eligible for that ticket should pay a half-fare in this period.[59]

The Parry Inquiry report noted that the morning peak is the period where the delivery of additional travel would be the most costly:

> School and business starting times are concentrated within a relatively short time span creating a peak in demand. Catering for this drives expensive investment in infrastructure that cannot be used efficiently outside the peak when demand for services is much lower. Constraints are not as severe during the evening peak, which is spread over a wider time span because of the variation between school and business finishing times.[60]

Since the Parry Inquiry in 2003, demand has continued to grow and as a result, the capacity constraints it referred to have become more of a problem over time (particularly on the rail network). Further capacity expansions, particularly through the city circle are likely to come at a relatively high cost.

As noted above, people travelling on Opal Concession and Opal Child/Youth card already have a price incentive to use rail services outside peak periods. Our preliminary view is that if off-peak fare arrangements for full fares are extended to other modes of transport (see Chapter 6) it would also make sense to extend them to half-fare concessions across modes.

There may also be a case for providing a price incentive for people travelling on Gold Opal cards to travel outside the morning peak. The Gold Opal card is available to a relatively wide group of people, and journeys on this card (or the paper equivalent, the Pensioner Excursion Ticket) account for just under 200,000 public transport journeys every day.[61] Not all these journeys occur in the

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58 ITLS news, *Concession fare restrictions could reduce public transport crowding*, 19 July 2011 http://sydney.edu.au/news/84.html?newsstoryid=7315 accessed 18 June 2015

59 Parry, T, *Ministerial Inquiry into sustainable transport in New South Wales – A framework for the future*, December 2003, p 66.

60 Ibid.

61 Based on estimated PET journeys for October 2013 to September 2014, Information provided by Transport for NSW for January 2015 fare change compliance, 28 November 2014.

morning peak but even if a relatively small proportion of them do, there are likely to be benefits from creating incentives to move them into off-peak times.

A price incentive has significant potential to shift their travel out of the morning peak as they may have greater flexibility about when they travel. For example, the purpose of these passengers' travel is more likely to be personal business, social recreation or shopping rather than work, work related or education. However, not all Gold Opal card holders will have this flexibility. For example, one group with access to the Gold Opal is Pensioner Concession card holders who are parents of young children. They may rely on public transport to take their children to school or childcare, and may have no choice but to travel in the peak. These people would likely be worse off if a price incentive were introduced – for example, if they were required to pay a half-fare for these peak trips.

8.3 What are the options for creating additional incentives?

There are several alternative ways to encourage Gold Opal card users to travel outside the peak. They include:

- Introducing greater discounts Gold Opal users outside peak periods.
- Increasing peak prices for Gold Opal users – either by charging for journeys in addition to the cap, or by having a higher daily cap when peak travel is included.

Each of these options are discussed below.

8.3.1 Introducing greater fare discounts for Gold Opal users outside peak periods

It is common in some other cities within Australia to offer free travel to Seniors Card holders and pensioners outside of peak periods (Table 8.1). However, the fares applicable in peak times tend to be higher than those that currently apply in Sydney.

Table 8.1 Senior discounts by time of day in other Australian cities

City	Peak fare	Off-peak fare
Melbourne	$3.76 daily cap	Free travel on the weekend
Adelaide	$1.72 per journey	Free travel outside the hours of 7-9am and 3-7pm Mon to Fri
Perth	Concession fares (typically less than 50% of the adult fare)	Free travel outside the hours of 6-9am and 3.30-7pm Mon to Fri

Source: Melbourne http://ptv.vic.gov.au/tickets/metropolitan-myki-fares/
Adelaide https://www.adelaidemetro.com.au/Tickets/Fares#Seniors_Metrocard
Perth http://www.transperth.wa.gov.au/SmartRider/Types-of-SmartRider/Seniors-SmartRider and http://www.transperth.wa.gov.au/tickets-fares/fares

One option for the Opal system is to make travel cheaper or perhaps free for Gold Opal users outside peak periods but subject to the cap for travel during these periods. This option would ensure that users who cannot shift their travel to outside the peak will not be worse off.

However, to be effective in encouraging people to travel outside peak periods there needs to be enough of a price difference between peak and off-peak periods. It is not clear whether additional discounting in off-peak periods would be enough if the current daily cap remains at $2.50. While public transport fares have increased by between 20% (ferries) and 46% (trains) in the past 10 years, the $2.50 ticket has not increased at all over this time. This has effectively made public transport cheaper for these passengers, while other passengers have continued to pay more.

There are also concerns about the continued sustainability of the program if Gold Opal users were to receive greater discounts in off-peak periods without an offsetting increase to their fares in peak periods (Box 8.1). Therefore, we will consider and analyse options that combine lower fares for Gold Opal users outside the peak (such as reduced or free travel in off-peak periods) with higher fares for these users in peak periods.

Box 8.1 Sustainability of the Opal Gold arrangements

The price of the Opal Gold (formerly the Pensioner Excursion Ticket) has not increased for 10 years. Over this time, the general level of prices (measured by the Consumer Price Index, or CPI) has risen by almost 30% and average Sydney public transport fares by slightly more than that, depending on the mode. Figure 8.1 shows a comparison of the cost of the PET/Opal Gold compared with each of these measures since 2006.

The cost of providing the Opal Gold is likely to rise in the future because:

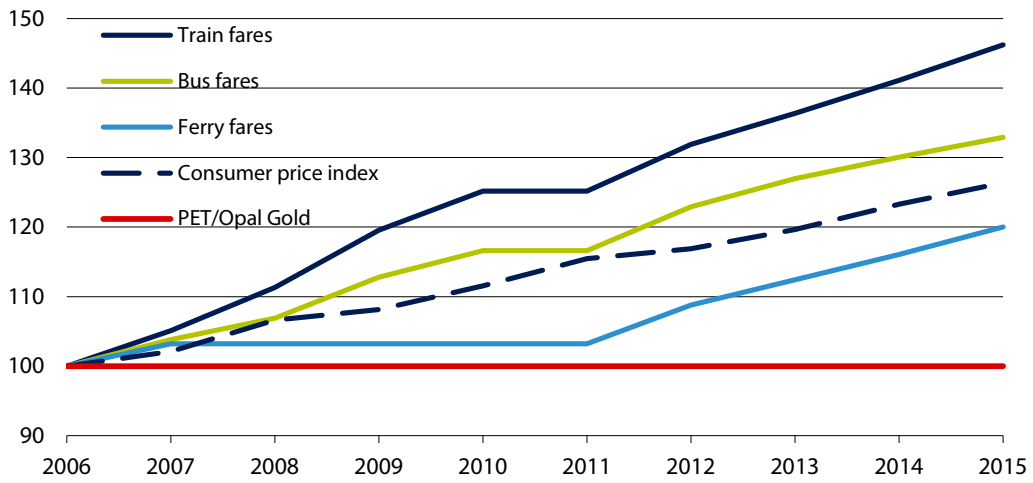
- ticket prices are not keeping pace with the cost of providing services, and
- higher numbers of people will be eligible as the population ages.

The number of people eligible for the Gold Opal card has been reviewed in the past. It is currently available to all Seniors Card holders, which can be accessed by people aged 60 or over and work up to 20 hours per week.

The 2003 Parry Inquiry recommended removing access to the paper ticket equivalent to Gold Opal (the PET) for higher income seniors. The Council of Social Service of NSW (NCOSS) has also previously expressed support for this approach. In 2013, it argued that the current system is inequitable as it allows people on medium and high incomes to access concessions that are far more generous than those available to many low income earners. For example, a high-wealth seniors card holder can make unlimited travel on the network for $2.50 per day using an Opal Gold card but a low income job seeker eligible for a Concession Opal card would pay $7.50.

While access to public transport may reduce the risk of social exclusion faced by seniors at all income levels, improving service frequency, scope of service and physical accessibility may be more important that affordability for those with higher incomes.

Figure 8.1 Index of changes in the price of the PET/Opal Gold compared with average fares and the change in the CPI since 2003



Note: For more information on access to transport and social exclusion of the elderly, see: University of Adelaide, Social isolation a criticial issue facing our elderly, 21 June 2011 https://www.adelaide.edu.au/news/news46361.html 10 June 2015, Hospital and aged care, *Australia's seniors: isolated and lonely?,* 27 April 2015 http://www.hospitalandagedcare.com.au/news/australia-s-seniors-isolated-and-lonely 10 June 2015, Betts, J, Transport and Social Disadvantage in Victoria, Section 4, in Currie, G *No way to go: Transport and social disadvantage in Australian Communities,* 2007; Social Exclusion Unit (England), 2003, *Making the connections, final report on transport and social exclusion*, Denmark, D, Local and Community Transport, Section 4, in Currie, G *No way to go: Transport and social disadvantage in Australian Communities,* 2007.

Data source: Council of Social Service of NSW (NCOSS), *Fare concessions: Transport concessions and subsidies in NSW,* January 2013, p 9. http://www.ncoss.org.au/resources/130222-Fare-Concessions-FINAL-2013.pdf

8.3.2 Increasing peak prices for Gold Opal users

Increasing peak prices for Gold Opal users would provide financial incentives for them to shift their discretionary travel to outside peak periods. There are a number of different ways this could be done, such as:

- applying a higher daily cap to anyone who uses the Gold Opal card in the peak period compared to the cap for those who only use it in the off-peak (or potentially compared to discounted or free travel in the off-peak), and
- charging the half-fare concession price for any Gold Opal journey in the morning peak, and excluding these journeys from the daily cap (all other journeys would be covered by the daily cap).

The first option should be relatively straightforward to implement and easy to understand. Given that Opal peak and off-peak times are chosen based on 'tap-on' time, rather than 'tap-off' time, it should be relatively simple to alter the rules for Gold Opal cards. The rail peak and off-peak periods could apply or the rules could be simplified for Gold Opal cards, for example, apply a higher daily cap if the first 'tap-on' of the day occurs prior to 9 am, otherwise the normal daily cap applies. Under both scenarios, individual trips up to the relevant cap would be priced at the half-fare concession rate.

The level of the higher daily cap when peak travel is included could be $7.50, in line with the current daily cap for Concession Opal card users. However, this would probably mean that many Gold Opal users would not reach the cap and so would pay half-fares for all the trips they make on days where they have made a trip in the peak. This may have significant affordability implications for Gold Opal users who make regular journeys in the morning peak that they cannot shift to the off peak.

IPART seeks comments on the following

15 Around 200,000 public transport trips are made on pensioner concession tickets every day (eg, Opal Gold). Passengers who travel on these tickets currently have no incentive to travel outside the peak when services are not as crowded. Do you support a higher peak travel charge for these products? If so, should this be combined with cheaper fares in off-peak times?