IPART Independent Pricing and Regulatory Tribunal | NSW

Maximum Opal fares until July 2028

Affordability

Information Paper

August 2024

Transport »

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

The Tribunal members for this review are:

Carmel Donnelly PSM, Chair
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Jonathan Coppel
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Invitation for submissions

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

Submissions are due by Monday, 16 September 2024

We prefer to receive them electronically via our online submission form.

You can also send comments by mail to:

Maximum Opal fares until July 2028 review team
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If you require assistance to make a submission (for example, if you would like to make a verbal submission) please contact one of the staff members listed above.

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The Independent Pricing and Regulatory Tribunal

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Contents

1 Introduction

Public transport connects our communities to essential services like healthcare, education, and employment. Accessible public transport empowers individuals to reach these opportunities, in turn fostering vibrant and connected cities. Affordable fares are an important component of access to public transport. When fares become too high, they can discourage public transport use, limiting the positive impacts of public transport and disproportionately affecting those who rely on it the most.

Measuring affordability is a complex task. Individual circumstances can influence whether fares are affordable to that individual, with some groups of people being more susceptible than others to financial vulnerability. Even within these groups, vulnerability manifests in diverse ways.

Our terms of reference require us to consider a number of matters when making our investigations for the purpose of reporting on our determination including: *"Ensuring affordability and accessibility for disadvantaged groups"*. We have considered affordability of fares generally including for disadvantaged groups.

To study affordability, we used a combination of analyses to consider affordability in different ways. We acknowledge that no single approach can measure all aspects of affordability. This analysis informs our fare-setting decisions during the review process, and considers general fare levels and targeted concession recommendations.

Affordability: key statistics

12% decrease in train fares since 2014 in **real** terms

14% increase in train fares since 2014 in **nominal** terms

$19 average weekly spend for Adult Opal card holders

1.1% of the median full-time weekly income in Sydney

5% of total Opal cards are Concession cards (50% discounts on fares)

13% of total Opal cards are Senior/Pensioner Gold Opal cards (concession fares up to $2.50 daily cap)

2 Affordability of Opal fares

This chapter outlines how Opal fares have changed over time, how they compare with public transport fares around the world and with other categories of expenses, and how much of their income people in NSW spend on public transport.

Affordability of public transport fares can be difficult to measure. It is not related to the costs of operating public transport but rather related to the ability of passengers to purchase fares. Unaffordable fares may force some people to adjust their public transport usage, like travelling less frequently or seeking discounted or cheaper travel options. Where passengers lack this flexibility, unaffordable fares can be an excessive financial burden or result in reduced spending in other areas.

We have examined affordability for the population generally as well as for disadvantaged groups of people, who might face cost barriers to access public transport.

An individual's public transport expenditure depends on the distance travelled, the frequency of travel, modes used, and fare rules. Income, stability of employment, number of dependants, cost of other living expenses, and eligibility for concessions or government benefits can impact capacity to pay.

To consider these aspects of affordability we examined:

- how Opal fares have changed over time compared to inflation, wages, driving expenditure, and other costs of living
- how Opal fares compare to public transport fares in other jurisdictions
- how much people spend on Opal fares as a percentage of income
- what groups of people spend the most on Opal fares.

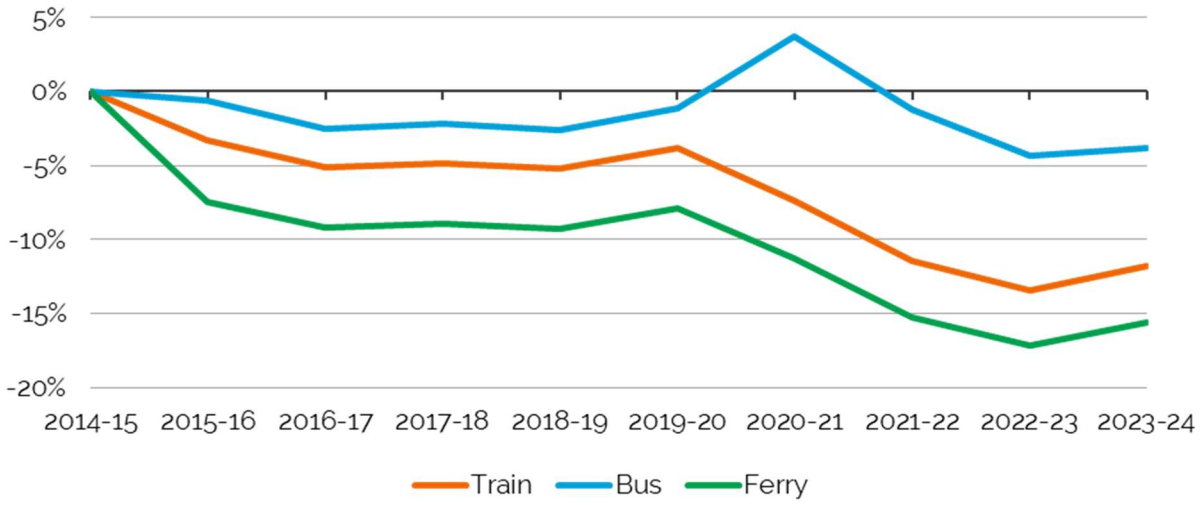
Our analysis compares data from sources such as the Australian Bureau of Statistics (ABS), Transport for NSW (TfNSW) and others. The sections below set out our analysis on each of these measures.

2.1 Opal fares have increased less than inflation, wages, and other costs of living

Each year TfNSW publishes its changes to Opal fares. Opal fares have increased in nominal terms since 2014. Train fares are almost 14% higher, bus fares are 24% higher, and ferry fares are almost 9% higher. The biggest change was a 43% increase in short distance bus and light rail fares in 2020 to incentivise social distancing for short distance trips which could be completed with active transport modes such as walking or cycling.

However, these fare changes have been smaller than the average increase of other goods and services. When adjusting for inflation, fares for trains, buses, and ferry are respectively 12%, 4%, and 16% lower in 2024 than they were in 2014.[a]

Figure 2.1 Cumulative Opal fare changes in real terms



a. Fares for each mode have been calculated as the average across distance bands

Source: TfNSW historical data on fares, IPART analysis

In recent years TfNSW has also introduced a $2 mode transfer discount, off-peak discounts for buses and light rail, and reduced the weekly cap from $60 to $50. These measures have worked to further reduce the overall weekly expenditure on public transport.

In nominal terms (i.e. without adjusting for inflation), fares have generally increased less than wages since 2013. The ABS Wage Price Index has increased by more than 24% since 2013 while we found that public transport fares have increased by between 9% and 24% over the same period (see Figure 2.2).

[a] This calculation does not include the Gold Opal card cap of $2.50, which has not changed since 2005.

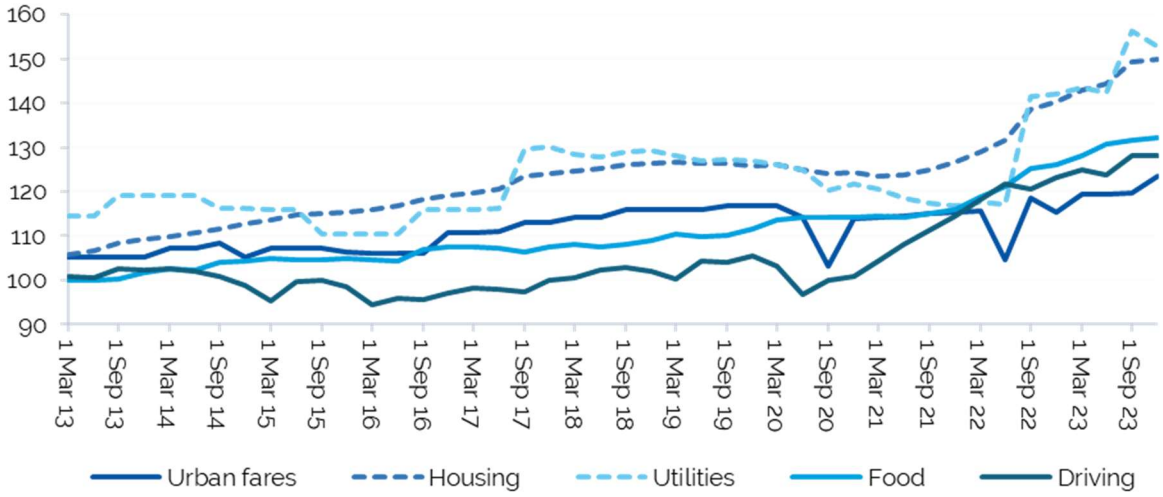
Figure 2.2 Change in fares compared to change in Wage Price Index

a: We adjusted the WPI to align the base year with the fare indexes
Source: TfNSW historical data on fares, ABS Data on Wage Price Index, IPART analysis

Public transport fare increases have also been less than other major expenditure categories in recent years. The ABS publishes indexes for all expenditure categories and releases updated figures for each major city in Australia. Since 2013, housing and utilities expenditure have increased the most (42% and 32% respectively), while the price of urban transport has increased by 17% over the same time (less than half the rate). Since 2020, indexes for driving and other expenditure categories have increased at a faster pace than urban fares.

We note that price stability is an important consideration when we set optimal fares. Fares that are stable over time and do not vary too much year-on-year allow travellers to better plan and budget their public transport use and protect them from excessive increases in their public transport expenditure. We have considered price stability in setting maximum fares in our draft determination. While our determination does not set a price path, we generally expect gradual fare increases over the determination period up to the maximum, rather than sudden increases to the maximum appropriate fare. More information on our approach to setting fares is available in our paper on form of determination.

Figure 2.3 CPI increase for major cost categories in Sydney



a. The CPI for Sydney has been used for each cost category, including Urban fares. The ABS calculates the urban fares index on the following transport modes: bus, train, ferry, tram, taxi and ride-sharing fares, not for holiday travel

Source: ABS Data on quarterly CPI changes, IPART analysis

2.2 How do Opal fares compare with other transport systems around the world?

We compared some transport fare options in the Opal network with a sample of cities worldwide (see Figure 2.4 - Figure 2.6).[b]

There are many factors that determine the rate of fares in a transport network. For example, some cities (e.g. Hong Kong, Singapore) are very densely populated and can maintain high patronage with relatively shorter journey distances; others (Sydney and Los Angeles) are spread over large distances and low-density areas. Car usage also varies across countries. Finally, the purchasing power of each country's currency depends on many economic factors.[c]

Fares in the Opal network are comparable with fares in cities with similar transport networks. The mean fare for short distances across our sample of cities is $3.3, while the mean long fare is $9.85. Long distance Opal fares in particular are lower than in other cities with similar geographic extension as Sydney.

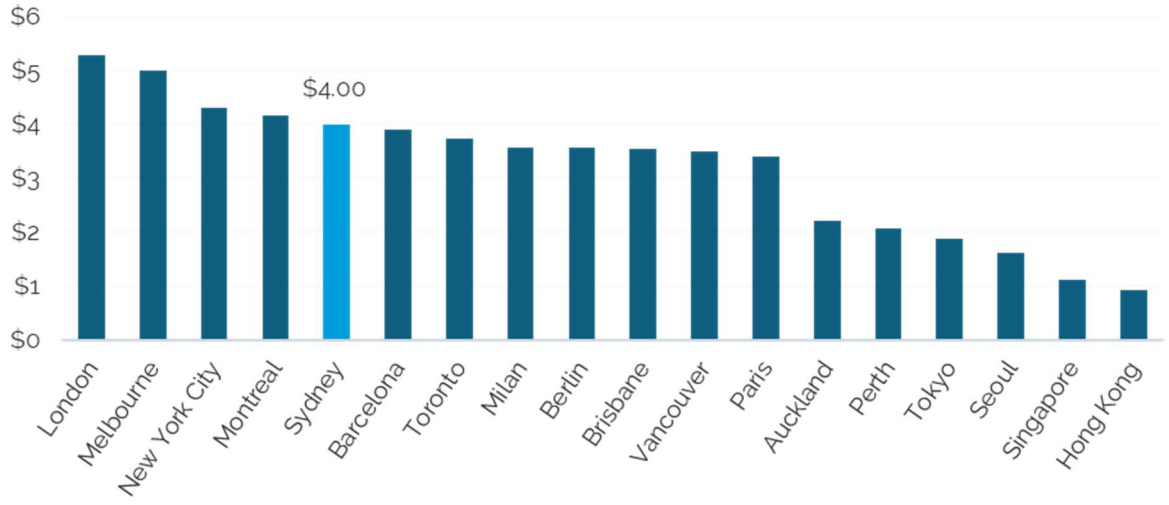
The cost of the monthly option is high in Sydney compared to most cities in our sample.

We note that most monthly options in other cities are subscription tickets with a fixed upfront price, while the Opal network's option is a cap that only applies if a passenger's usage in a given week is higher than the $50 threshold. This provides the Opal passenger with greater flexibility and no loss if travel is less than originally planned.

b We note that differences in transport systems, fare structures, and geographies often complicate direct comparisons.

c Our analysis is based on a direct currency conversion to AUD as of December 2023 without adjusting for Purchasing Power Parity. PPP indexes are based on each country's economic parameters, while the cities chosen in our sample are often outliers in their respective country.

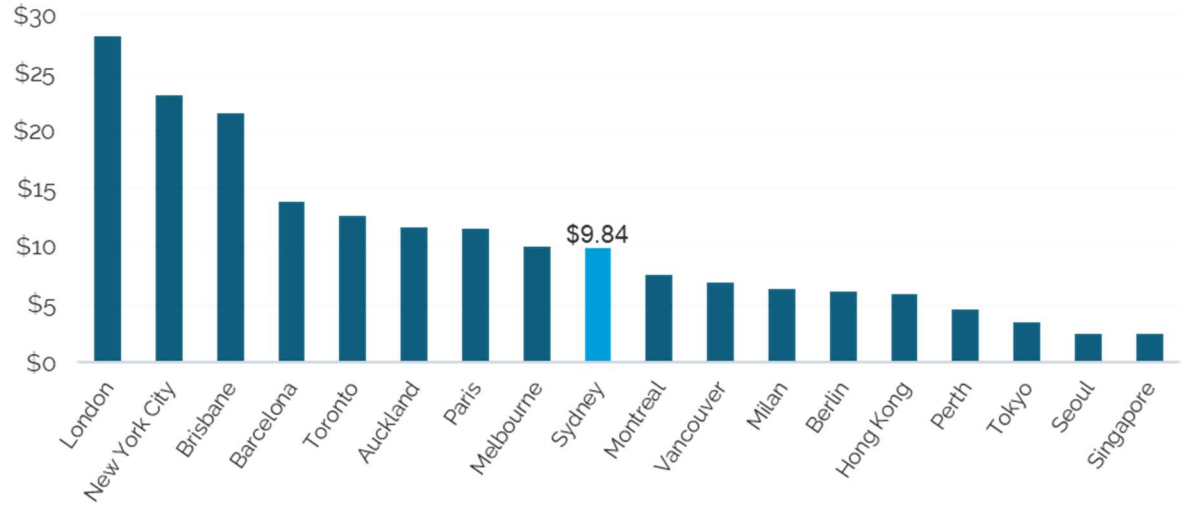
Figure 2.4 Adult fares (shortest available distance) for train/metro systems around the world (AU$ December 2023)



Note: Depending on fare structure and geography for each city, the shortest available distance was calculated either as the shortest distance band offered (e.g. Opal network 0-10 km), the Zone 1/city limits area fare for zone-based systems (e.g. London, Paris, and Milan subway systems), or the fare charged for a trip between the closest apart stations (e.g. Singapore, Hong Kong).

Source: Régie Autonome des Transports Parisiens, Transport for London, Metropolitan Transportation Authority, Translink (Queensland), Transports Metropolitans de Barcelona, Toronto Transit Commission, Auckland Transport, Public Transport Victoria, Transport for NSW, Société de transport de Montréal, Azienda Trasporti Milanesi, Translink (British Columbia), Berliner Verkehrsbetriebe, Transperth, MTR Corporation Limited, Tokyo Metro, Land Transport Authority, Seoulmetro

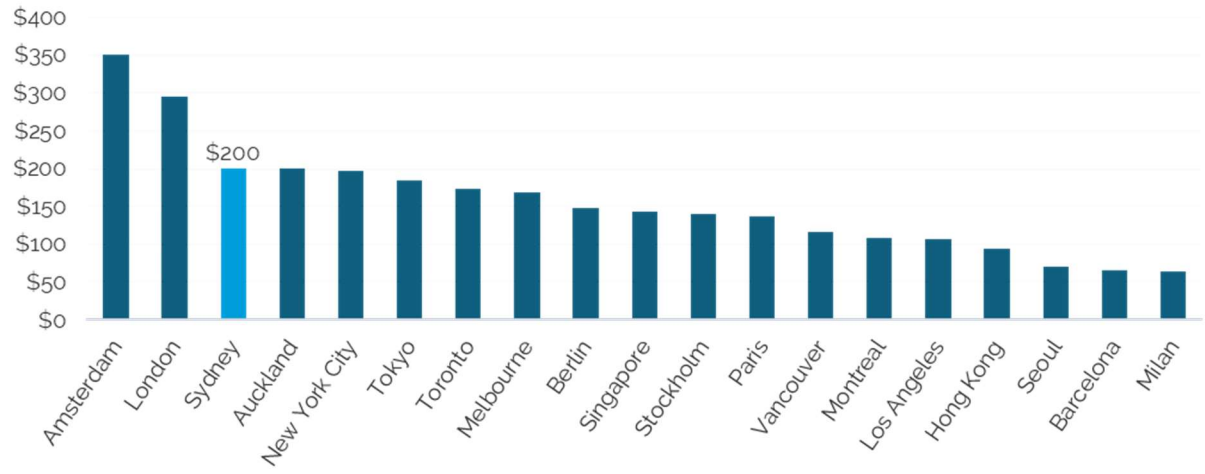
Figure 2.5 Adult fares (longest available distance) for train/metro systems around the world (AU$ December 2023)



Note: Depending on fare structure and geography for each city, the longest available distance was calculated either as the longest distance band offered (e.g. 65 km+ in the Opal network), the highest number of zones crossed from the city centre outwards (e.g. Milan, Paris, London), or the fare charged for a trip between the farthest apart stations (e.g. New York, Toronto).

Source: Régie Autonome des Transports Parisiens, Transport for London, Metropolitan Transportation Authority, Translink (Queensland), Transports Metropolitans de Barcelona, Toronto Transit Commission, Auckland Transport, Public Transport Victoria, Transport for NSW, Société de transport de Montréal, Azienda Trasporti Milanesi, Translink (British Columbia), Berliner Verkehrsbetriebe, Transperth, MTR Corporation Limited, Tokyo Metro, Land Transport Authority, Seoulmetro

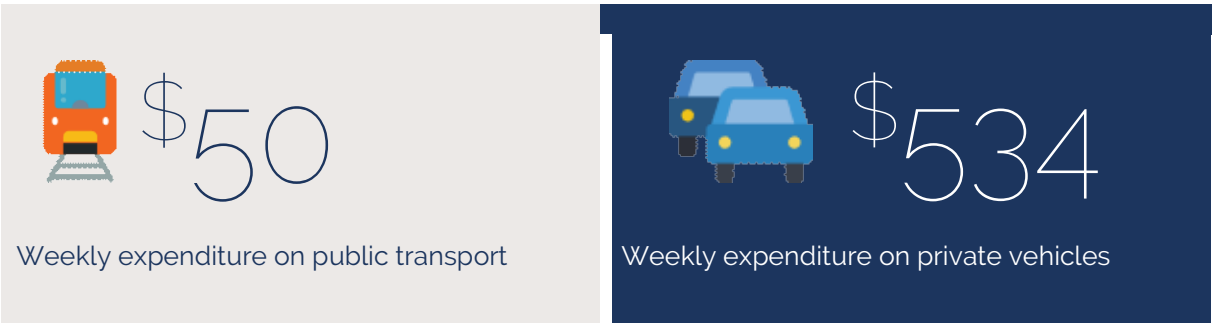
Figure 2.6 Price of monthly subscription/cap for rail systems around the world (AU$ December 2023)



Note: Subscription price, where available, was based on the standard, full price, Adult monthly pass, without concession discounts and without surcharges for long-distance routes. For cities without a monthly pass or monthly cap, the weekly or daily caps have been multiplied accordingly.
Source: Régie Autonome des Transports Parisiens, Transport for London, Metropolitan Transportation Authority, Translink (Queensland), Transports Metropolitans de Barcelona, Toronto Transit Commission, Auckland Transport, Public Transport Victoria, Transport for NSW, Société de transport de Montréal, Azienda Trasporti Milanesi, Translink (British Columbia), Berliner Verkehrsbetriebe, Transperth, MTR Corporation Limited, Tokyo Metro, Land Transport Authority, Seoulmetro

2.3 People in NSW generally spend a small proportion of their income on public transport

We have estimated weekly public transport expenditure and compared it to other estimates published by other organisations and researchers. We found that most estimates show that public transport fares represent a relatively small category of household expenditure in NSW.



A 2023 report from the Australian Automobile Association[1] calculates that transport spending in Sydney (including on private vehicle) is $534 per week per household, comprising 16.6% of income[d].

[d] To calculate income, the report uses a 'typical' household of two individuals in their late 30s with children living in a detached house, both of whom work fulltime in the CBD.

In this study public transport expenditure is estimated to equal $50 per week per household and only makes up 10% of individuals' transport spending (1.6% of income), the rest being mainly made up of car loan payments, fuel, tolls, and insurance. Related driving expenses such as parking fees were not included.

In 2021 the Australian Productivity Commission[2] calculated that Australian households with some public transport spending use at most 4.4% of their income on public transport. It also found annual public transport spending is highest in dollar terms for the highest income households, but lowest in percentage terms.

We used data on average expenditure on the Opal network from Transport for New South Wales to calculate public transport spending as a proportion of income. We include various measures of income, including proxies for low and inconsistent income; the results are outlined in Table 2.1 below.

For most people using the Opal network, public transport expenditure is between 1-6% of incomes. For those that spend the average weekly adult amount ($18.83) this represents between 1-4% of weekly incomes.

We have calculated that some people who work less than full time, travel frequently or over long distances and are on low incomes could spend up to 8-11% percent of their weekly earnings on public transport. This could occur if their pattern of travel was more than double the average Adult Opal card user (high frequency or long-distance users) and the passenger was not already eligible for another concession or discount (such as Opal Gold or a concession card). We do not know how many people could be in this category, and if the potential higher than average public transport usage is in place of other travel expenditure (such as car). We do know that the proportion of Adult passengers reaching the weekly cap is approximately 7% (See Table 2.2), which we would expect to be a mix of full time and part time workers.

Table 2.1 Proportion of income spent on public transport

		Weekly spend as a percentage of income	
		Average adult weekly expenditure ($18.83)[a]	$50 weekly cap ($25 concession)
Median income, full time [b]	$1,686	1.1%	3%
Median income, part time	$650	2.9%	7.7%
Minimum wage 20-hrs	$464	4.1%	10.8%
JobSeeker recipient [c]	$408	3%	6%
Poverty line[d]	$700	2%	3%

a. Average weekly expenditure refers to the Adult (Opal card and contactless payment) average expenditure in a representative week in March 2024
b. All median incomes refer to the median income in Sydney as calculated by the ABS in 2023
c. The average weekly expenditure and weekly cap for concession users has been used to calculate weekly spend as a percentage of income for JobSeeker recipients and for those under the poverty line
d. The poverty line is defined by the OECD as 50% of median income.
Source: TfNSW data on weekly expenditure by card type; ABS Census data; IPART analysis

Table 2.2 Average travel frequency and expenditure by Opal card type

	Average number of weekly journeys	Average expenditure	Proportion of cards reaching the weekly cap
Adult weighted average	4.8	$18.83	7%
Adult Opal	6	$22.96	11%
Contactless payment	4	$16.03	4%
Child	3	$5.71	2%
Senior/Pensioner	4	$4.84	n/a
Concession	6	$13.36	11%
Overall	**4.6**	**$16.34**	**7%**

a. A journey is defined as all the trips that a card makes within the allowable transfer period (e.g. taking a bus and then a train within the allowable transfer period are two trips but one journey)

Source: TfNSW data on weekly expenditure by card type, March 2024; ABS Census data; IPART analysis

An alternative approach to measuring affordability involves calculating the cost of a hypothetical basket of public transport consumption. This basket would represent a typical set of public transport journeys undertaken by an individual. In fact, relying solely on actual public transport expenditure might underestimate the true financial burden of fares. Existing expenditure data reflects adjustments households have already made in response to fare levels. For example, low public transport spending among low-income households may not always signify affordability, but could also signal other patterns such as a shift towards alternative modes of transportation.[3]

We selected a list of popular public transport routes for commuters to the CBD and calculated how much it would cost under current fares to travel several times a week for work.

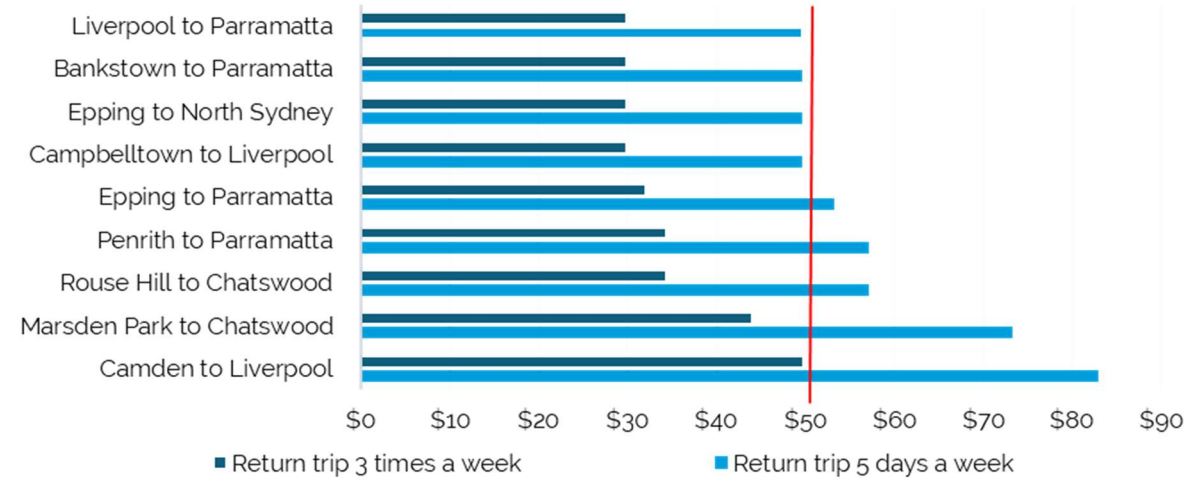
For those who commute 3 or less times a week into the CBD, total weekly fares remain below the $50 weekly cap even for longer distances. Those who travel 5 times a week or more would spend more if there was no weekly cap. Having to switch public transport mode also results in higher costs. We selected the Fairfield West, Northmead, Frenchs Forest and Marsden Park routes as they involve a bus trip followed by a train trip. The total fare for these journeys includes a $2 inter-mode discount per mode switch, but it is still significantly higher than commuters who only take one mode for their trip.

Figure 2.7 Typical weekly travel expenditure for selected trips to the CBD

a. All trips are at peak times with no concession discounts
b. The red line corresponds to the $50 weekly cap

Source: TfNSW TripPlanner, IPART analysis

Figure 2.8 Typical weekly travel expenditure for selected trips to major hubs



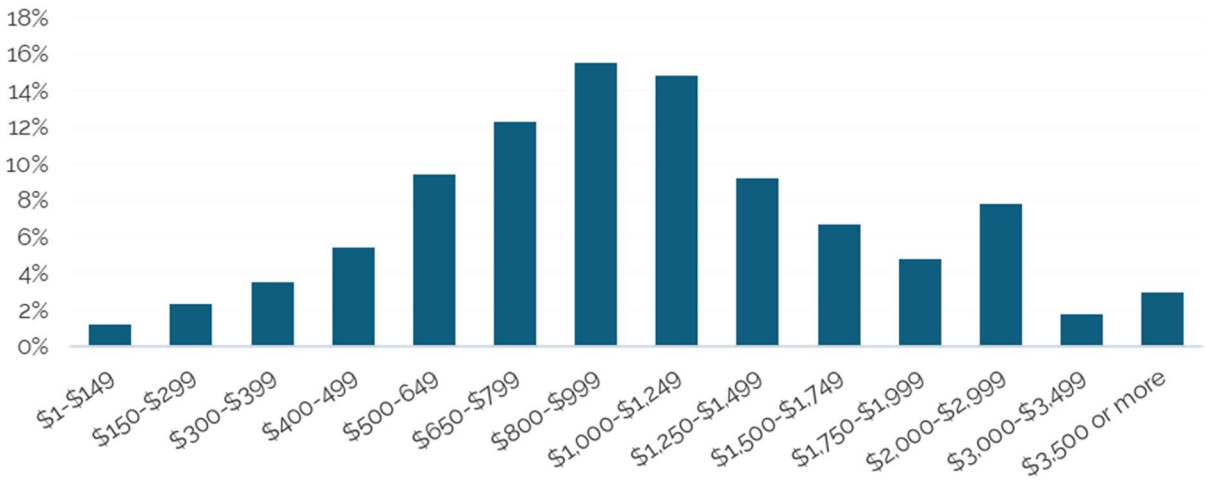
2.4 Public transport use is highest among middle-income earners, but mostly depends on geography

We complemented our study of affordability with an analysis of Census[e] data on public transport commuters. The purpose of this analysis is to provide context to the findings of public transport expenditure outlined in the preceding chapters, by considering the incomes of those who spend money on public transport.

Appendix A presents our analysis in detail. We found that geography, availability of services, and commuting patterns are all factors that mediate the relationship between income and public transport use. We found middle-income earners are more likely to commute via public transport (Figure 2.9), but acknowledge that level of usage could be influenced by factors such as greater access to public transport options in the areas these workers reside in. We found that higher income areas are more highly correlated to public transport use and with higher working from home rates. These areas are usually closer to the CBD and have better transport options. We also found that the average income of public transport users is relatively similar across areas, while the income of drivers is higher for areas closer to the CBD (Figure 2.10).

These findings suggest that access to public transport options and services might be a better indicator of public transport use than income. In addition, from an affordability perspective, location and distance affect fares (and as a result, expenditure on public transport), but not the capacity to pay of commuters.

Figure 2.9 Proportion of commuters travelling via Public Transport by weekly income

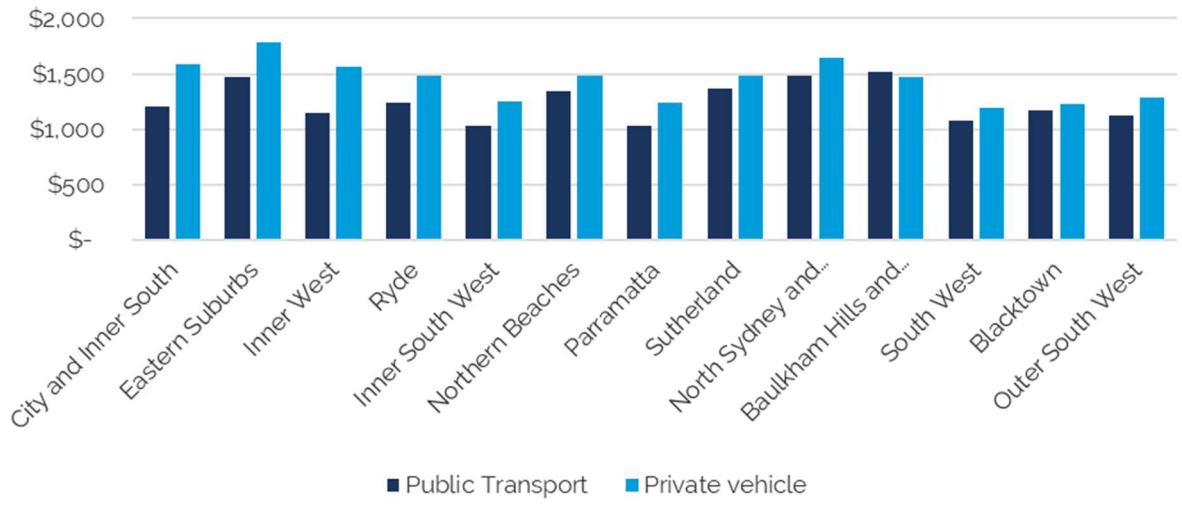


a. Income in this analysis refers to gross weekly income, inclusive of employee income, investment income, private transfers, government pensions and allowances

Source: ABS 2021 Census Data; IPART analysis

[e] We acknowledge the complexity involved with deriving causal relationships between income and public transport use, as these are influenced by a variety of inter-related factors. There are also limitations with using Census data, as it is only available up to 2021 and it restricts our analysis to public transport usage for the purpose of commuting to work (excluding other types of travel).

Figure 2.10 Greater Sydney Statistical areas by distance to the CBD and median weekly income – private vehicle vs public transport users



Source: ABS Census Data, IPART Analysis

Income refers to average weekly personal income. The ABS provides income distribution by income band. Income in this chart has been calculated as a weighted average (number of people in each band x mid-point of each band).

3 What did stakeholders say about affordability?

This chapter outlines the feedback we received to our Issues Paper around affordability and highlights the main concerns of stakeholders.

3.1 There is a perception of unaffordability of Opal fares in NSW

In submissions to our Issues Paper and responses to our Have your Say survey we heard concerns about affordability, fairness and service quality (value for money)[f] of fares.

Stakeholders considered high fares are a financial burden, especially for frequent users or those travelling long distances. Many submissions advocated for free public transport or fare reductions to address concerns of affordability, reflect service quality or fairness. A recent public transport attitude survey[4] identified similar views, indicating financial issues as a growing concern of public transport users, alongside a desire for service improvements.

Sometimes affordability concerns are tied to perceptions of degrading service quality, as some stakeholders have said they feel they pay increasing fares for poor levels of service. Some people in areas with limited public transport options expressed dissatisfaction about paying high fares for infrequent services and restricted timetables.

Other comments linked affordability concerns to fairness of the fare structure. For example, concerns were raised about the fairness of:

- the cost of long and short distance travel[g]
- multi-mode fares where some commuters have no choice but to switch modes
- peak-hour pricing being perceived as an unfair surcharge for non-discretionary travel (rather than a discount for off-peak trips)
- the removal of the free or half price trip incentive after eight trips.

Some stakeholders expressed a view public transport operators should not make a profit from fares. While our analysis of the cost recovery of the Opal network found that fares cover about 18% of operating costs, these types of concerns likely reflect a more widespread perception that fares cover the costs of public transport operations or provide a profit to operators, leading many stakeholders to view fare increases as unfair.

[f] Affordability, fairness and services quality are distinct issues but are often raised together in feedback on fares. This paper focuses mainly on issues of affordability. A discussion on service quality is found in the financial performance paper. Issues about the fairness of fair rules is discussed in the form of determination and fare package papers.

[g] This included passengers who travel 1-2 stops or stations and sought shorter and cheaper fare bands, as well as passengers who highlighted the financial impact of travelling long distances to access work or education and pay the maximum fare bands.

We note that the complexity of the fare structure can contribute to perceptions of unaffordability and unfairness. The Opal system has a number of rules that are applied to determine the final fare, including mode, distance, time of day/week, transfer discounts and daily and weekly caps. These rules influence the fare paid and have changed several times in the 10 years since the introduction of the Opal system. The more complex the fare rules, the harder it can be for passengers to anticipate their likely fare, and this can contribute to confusion about the fare structure and the perception of unfairness and unaffordability.

Some stakeholders suggested that the current economic landscape might induce some people to avoid paying fares, regardless of their level, to try and avoid some costs when financially constrained. While fares have not increased in real terms in recent years, fare evasion has registered a marked increase since 2019 (See also our discussion of fare evasion in our information paper on financial and operational performance).

Box 3.1 Free public transport

Several responses to our Have your Say survey sought the introduction of a fare-free regime citing examples from other jurisdictions. These stakeholders considered that free public transport would improve affordability and access for disadvantage individuals, patronage, and reduce congestion, pollution, and ticketing and enforcement costs.

Several jurisdictions in Europe offer free public transport, such as the countries of Malta and Luxembourg, and the cities of Hasselt (Belgium), Dunkirk and Montpellier (France), and Tallinn (Estonia).[h] In the US, Kansas City introduced a fare-free regime in 2020. In Australia, Melbourne introduced a free tram zone in its CBD in 2015. The governments of Queensland, Tasmania, and the Northern Territory have announced significant fare discounts for limited periods in 2024.

Evidence on the beneficial impact of free public transport is mixed. In some cases, zero or very low fare regimes have increased the uptake of public transport. However, higher patronage did not always correspond to a decrease in private vehicle use, and has in some cases resulted in overcrowding of services. Jurisdictions that decide to implement free public transport need to cover the revenue shortfall through other means, most often through tax contributions.

Luxembourg's free transport initiative costs the equivalent of $65m a year.[i] Studies have shown that car use and traffic congestion in Luxembourg is equivalent or higher than prior to the introduction of free public transport. Most of the increase in public transport patronage is attributable to travellers who would have otherwise walked or cycled.[5] The Belgian city of Hasselt experienced a similar situation, before it revoked its fare-free regime due to financial constraints.

[h] We note that many of these jurisdictions are small, densely populated cities that are administered locally and whose transport infrastructure mainly consists of buses.

[i] On a per capita base, Luxembourg is the richest country in the world, and its GDP per capita is almost twice that of NSW.

Box 3.1 Free public transport

In Tallinn, public transport patronage is lower than it was before free fares. Conversely, car usage has surged, and it has increased relatively more for more disadvantaged households. Urban planning, the availability of transport options, and cultural preferences around car use are more significant determinants of public transport use.[6]

In Kansas City, free fares in a portion of its transport system have increased patronage, removed significant costs for fare enforcement, and stimulated growth in its CBD. While access to public transport has mostly improved for higher-income users in well-serviced areas, it did not significantly improve for more disadvantaged groups.[7]

In Melbourne, a Parliamentary inquiry into the free tram zone found that it significantly increased patronage and provided economic benefits, such as tourism revenue, to the CBD. Surveys also show improved customer satisfaction on the price of public transport after the introduction of the free zone. However, it also found evidence of overcrowding, increased dwell times and slower services, uncomfortable passenger experience, safety issues and boarding difficulties for passengers with mobility needs and other tram commuters. This was accompanied by no notable impact on traffic congestion in city roads. indicating many of the new public transport trips would have otherwise been walking or cycling trips. The inquiry found the impact to farebox receipts was approximately a 10% reduction in farebox receipts after the introduction of the free tram zone.[8]

3.2 Some public transport users feel constrained by cost-of-living pressures

While we have found fares are affordable when compared on various measures, we consider that the perception of unaffordability largely stems from broader cost-of-living pressures and changes to the fare rules and incentives over time. While fares have not increased in real terms, other costs such as housing, groceries, and private vehicle ownership have all seen significant rises in recent years. Concern over these other cost of living pressures likely influences the perception of public transport fares.

We considered cost of living concerns when assessing the affordability of public transport.

While the average public transport expenditure represents a relatively small proportion of median income (See Table 2.1), some individuals spend up to double this amount. Those who travel more often, further, and via multiple modes face higher fares, and in some cases may be financially constrained.

In our draft fare determination, we have been mindful of the financial impacts on the community. We have balanced the affordability of fares highlighted in this paper with the other considerations outlined in our review, such as the need for financially sustainable public transport.

In addition to single fares in our determination, some elements of the fare structure have an important impact on affordability. These elements act to limit the financial impact of fares, particularly for frequent, multi-mode and long-distance travellers. We consider these elements are important tools for many passengers when planning and budgeting their public transport use and do support passengers managing their transport expenditure amongst the cost-of-living pressures experienced by many within the community. We have described these elements below and include recommendations to maintain affordability of fares over the determination period.

Opal transfer discount and trip advantage

We consider that the transfer discount applied when switching between modes in a single journey plays an important part in recognising the integrated nature of public transport and limiting the price for multi-mode journeys, but it is currently too low relative to single trip fares.

Within the Opal system, different modes of transport have different fares to recognise the different costs associated with delivering each service. To efficiently complete their journeys, many passengers need to take multiple modes within a journey, which would result in higher fares than if the same distance journey had been undertaken using a single mode. For this reason, a $2 inter-mode discount allows TfNSW to charge separate fares for different modes but recognises the integrated nature of opal network.

At the time it was introduced, the $2 inter-mode discount was almost equal to the lowest adult bus fare ($2.10). This meant that a journey involving a short bus trip to a train station, and a subsequent train trip would be charged with only a small incremental price ($0.10) for mode-switching. Currently, the same journey would attract a $1.20 charge for changing modes. According to Opal data supplied by TfNSW, the transfer discount was applied to 15% of journeys in a representative week in 2024. This proportion has remained stable in recent years.

In feedback to our Issues Paper, many passengers told us they take multiple modes because it is the only available option, rather than a choice based on price or convenience. In other cases, travellers use multi-mode journeys by service issues such as trainline delays. Due to the multi-modal nature of many journeys, we received many requests for a more integrated structure that is based only on distance travelled rather than modes. We consider the transfer discount best replicates the concept of an integrated fare structure within the technical constraints of the current card-based Opal system, and recognising the different costs and willingness to pay for different modes,

The maximum fares for single trips that we recommend are based on a fixed ($ per trip) and variable ($ per km) component. The objective of a transfer discount is to refund the fixed component of each additional leg of a journey, meaning passengers pay the fixed component only once.

We consider that the inter-mode discount should be increased and linked to movements in other fares. As TfNSW increases its fares every year (up to the maximum set by IPART), all elements of the fare structure should change together, so that the original price incentives retain their value with respect to single mode fares.

We consider the inter-mode discount should be set as a proportion of the lowest Adult peak bus fare, since the shortest distance fare band for buses is an appropriate proxy for the fixed component of a trip. As the lowest bus fare has increased to the maximum determined fare in recent years, it is appropriate for the inter-mode discount to increase accordingly.

In 2019, the inter-mode discount was 90% of the lowest Adult peak bus fare. We have recommended linking the inter-mode discount to around 70-90% of the lowest adult peak bus fare to approximately maintain this ratio. For the current fares in 2024, this would result in an inter-mode discount of between $2.24 to $2.88.

Weekly cap

The weekly cap functions as a safety net for customers while providing full transparency and flexibility.

In most jurisdictions around the world, public transport authorities offer fixed-price subscription packages that allow unlimited travel for specified time periods, usually a month or a year. These can provide an opportunity for frequent travellers to limit their transport expenditure if the subscription price is less than what they would have paid with single trip tickets. However, if a traveller's circumstances change and they are unable to use the subscription to the extent that they intended, they may break even or pay more than they would have paid on single fares. The subscription model of fares is used by many public transport providers as well as other types of businesses (e.g. gyms, entertainment providers, software packages etc.). Consumers are familiar with these models, and with good user interfaces for convenient purchase and billing they are able to easily manage their budgets and consumption of different services in many areas of their lives. These models also allow businesses to better forecast revenue and usage of their services.

Price caps achieve the same important objective for consumers by limiting the bill for heavy users of public transport. Importantly however, caps do not require an upfront payment, which supports affordability and access for a greater number of passengers, particularly lower-income travellers who might not be able to afford the upfront payment. It also allows the flexibility for all passengers of a pay as you go format which limits any risk of overpaying.

If a traveller does not use public transport as heavily in a week, they will pay less than the cap, whereas with the subscription approach they still pay the full subscription amount no matter what their level of usage.

In the years 2020 to 2023, approximately 2-3% of cards reached the weekly cap. This percentage has increased to 7% in 2024. 7% of Adult and Contactless card passengers reach the daily caps, and 11% of concession card users reach the weekly cap.[j]

[j] Up until October 2023, trips after the 8th trip in a week were discounted at 50%. Transport for NSW removed this travel reward system in October 2023, but kept the $50 ($25 for concession) weekly cap unchanged despite raising base fares by an average of 3.7%. The daily cap for Friday was aligned with the daily caps for Saturday and Sunday.

The weekly cap has not changed since it was set at $50 in 2019, down from $60 previously. Since other fares have increased, the cap has become relatively more generous. For example, a commuter on the 10-20 km train distance band will now reach the cap after 10 trips, rather than the 11 trips required in 2019.

We consider that the cap serves an important function for improving affordability of public transport fares, especially for heavy users of the Opal network. It simplifies household budgeting for transport costs, and it applies to most services across the Opal network, making it easy to switch modes. This means that it reduces friction in public transport decision making, which is an important element to improve the use of the public transport network and increase the proportion of travel undertaken by sustainable modes. We note our previous recommendation to harmonise fares so that all elements of the fare structure change together should also include annual escalations to the weekly cap at the same time as TfNSW increases single fares and daily caps. However, we do not propose to recommend a change to the $50 cap until 2026. This is because while the current road toll cap trial is set at $60, increases to the public transport cap may be perceived as poor value as it approaches the toll cap.[k]

[k] As noted in our analysis above, the price of driving private vehicles generally far outpaces the price of Opal fares, and tolls are only one component of the price of driving. However, we think there is a risk of people mistakenly perceiving them to be equal, especially if they feel public transport is not good value for money. This is because the two types of caps may be inaccurately perceived as providing the same or equivalent service.

4 Who is most vulnerable to unaffordable fares?

This chapter outlines how socio-economic disadvantage can be worsened by unaffordable public transport fares. We explore current concession arrangements for disadvantaged communities and how extending eligibility for concessions could reduce disadvantage.

Public transport is essential for many members of the community but can be particularly important for those facing financial disadvantage or other types of vulnerability. It connects people with vital opportunities like employment, education and healthcare, without which they face a heightened risk of social exclusion. Social exclusion has significant negative impacts on individuals, such as reduced income, health, and well-being. This in turn has implications for the wider society, such as reduced productivity and higher welfare costs.

Groups that are at greater risk of disadvantage include the unemployed, underemployed, students, pensioners, single parents with dependants, and individuals with significant mental and/or physical disabilities. For people who rely on government benefits such as Centrelink payments, transportation costs can represent a significant burden on their finances.

Unaffordable fares exacerbate existing inequalities. For example, recipients of JobSeeker payments need to fulfill mutual obligation requirements and be actively looking for work. As private vehicle travel is more expensive, job seekers often rely on public transport when looking for employment.

Casual and shift workers can be vulnerable to unaffordable fares if they are required to make more trips for multiple short work periods.

Those who suffer from mental and physical health conditions can require frequent trips to access healthcare and treatment. This is especially true for seniors, who might also be less able to drive in older age.

4.1 Concession fares are an important tool to ensure public transport is accessible for those who need it the most

Concession fares (i.e. discounted fares for eligible people), rather than broad fare changes, represent the best tool to address affordability for disadvantaged groups, allowing them to access transport when they would have otherwise been unable to.

Most jurisdictions in Australia and overseas offer a wide range of concessions. The most common categories are children, students, and seniors. Many jurisdictions offer discounts to people looking for work, and recipients of some government benefits.

These concessions are generally targeted at those individuals that have a lower capacity to pay for transport and are at risk of social exclusion or greater financial burden if fares are too high.

Governments rely on several proxies for disadvantage and capacity to pay such as age (youth and senior discounts), receipt of government benefits (unemployed, pensioners, disability pension), geography (specific journeys), occupation (students, evening students, apprentices).

Figure 4.1 Concession arrangements in selected jurisdictions worldwide

	Children	Students	Seniors	Unemployed	People with disabilities	Other
Opal network	✓	✓ (domestic)	✓	✓ (max rate of benefits)	✗ (only vision impaired and companion/carer)	Veterans, Asylum seekers, Apprentices
Melbourne	✓	✓	✓	✓ (health care card)	✓ (if receiving Disability pension, or if unable to use ticketing system)	Veterans, Asylum seekers
Brisbane	✓	✓	✓	✓	✓ (if unable to use the ticketing system)	Veterans, Asylum seekers
Perth	✓	✓	✓	✗	✓ (if receiving Disability pension)	Veterans
Auckland	✓	✓	✓ (off-peak)	✗	✓	Low income
Singapore	✓	✓	✓	✗	✓	
Hong Kong	✓	✓	✓	✗	✓	Selected journeys
London	✓	✓	✓ (off-peak; anytime if disabled)	✓	✓	Veterans, Annual pass holders
Paris	✓	✓	✓ (means tested)	✓	✓	Large families
Milan	✓	✓	✓ (means tested)	✓	✓ (means tested)	Youth, Evening students, Foster children, Large families, Low income
Barcelona	✓	✓	✓ (means tested)	✓	✗	Large families, Single-parent families, Travellers that sold a motor vehicle and committed not to buy a new one
Berlin	✓	✓	✓	✓	✓	Apprentices
New York	✓	✓	✓	✗	✓	Medicare recipients
Toronto	✓	✓	✓	✓	✓	Youth
Montreal	✓	✓	✓	✗	✗ (only companion/carer)	

Source:: Régie Autonome des Transports Parisiens, Transit for London, Metropolitan Transportation Authority, Translink (Queensland), Transports Metropolitans de Barcelona, Toronto Transit Commission, Auckland Transport, Public Transport Victoria, Société de transport de Montréal, Azienda Trasporti Milanesi, Berliner Verkehrsbetriebe, Transperth, MTR Corporation Limited, Land Transport Authority

4.2 Concessions in NSW target vulnerable users, but some of them might benefit from expanded eligibility criteria

In NSW, the Opal system gives concession fares[l] (50% of the regular fare) or free travel cards to selected categories of travellers:

- Domestic tertiary students
- Children
- Seniors/Pensioners
- Apprentices and trainees
- Asylum seekers
- Centrelink customers on the maximum rate
- Veterans and War Widow/ers
- Some current and former TfNSW employees
- Vision Impaired people
- Carers of disabled people requiring a companion to travel with.

NSW seniors, interstate seniors, pensioners, and asylum seekers are also eligible for a Gold Opal card. In 2024, 5% of Opal Cards were concession cards, and 13% were Gold Opal cards.

In the sections below, we analyse some categories of concessions in detail and provide recommendations on concession fares and eligibility.

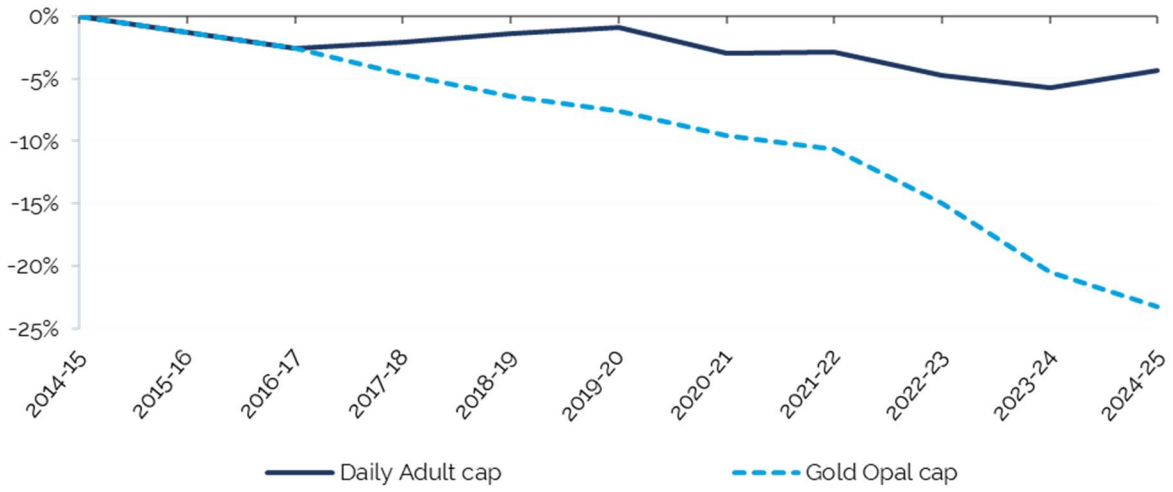
Concession fares for seniors and pensioners

Seniors over 60 who work fewer than 20 hours a week and Pensioners receiving Pension payments from the Commonwealth Department of Social Services are eligible for Gold Opal cards, which entitles them to concession fares and a $2.50 daily cap on public transport fares. This means that on any given day, a Gold Opal card holder cannot spend more than $2.50 on public transport.

The Gold Opal Card $2.50 daily cap for seniors and pensioners has not changed since 2014, when it was introduced to replace the existing Pensioner Excursion Ticket, which had cost $2.50 since 2005. Because of this, the cap has fallen in real terms faster than the Adult daily cap since 2014 (see Figure 4.2)) The weekly Adult cap has fallen more in real terms since it was reduced to $50 in 2019.

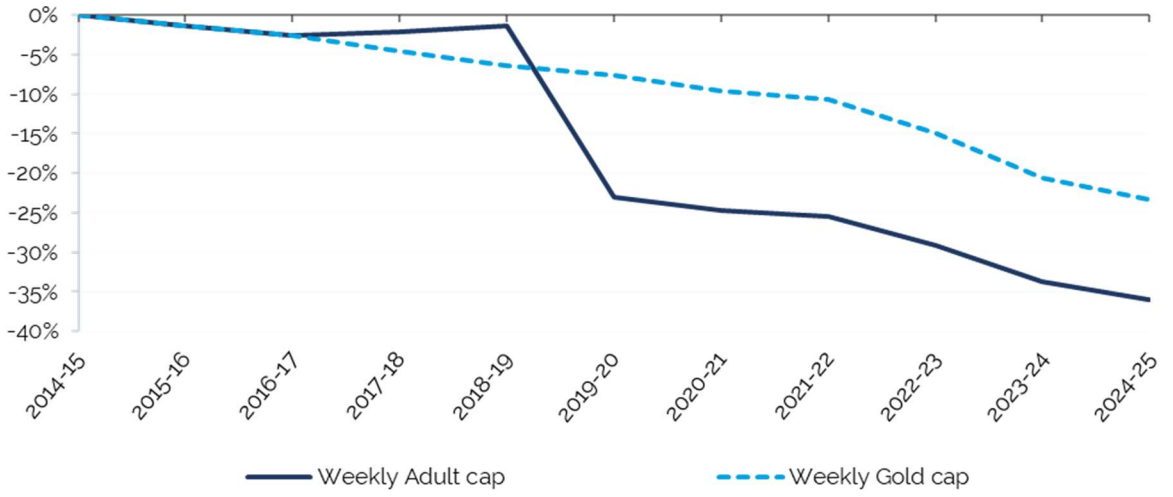
[l] The NSW government covers the shortfall in transport revenue resulting from the discounted fares, so concessions represent a subsidy from general tax revenue to specific categories. This is different from other jurisdictions (such as Singapore), where the desired optimal price of full fares is calculated taking the revenue shortfall of discounted fares into account. This means that the adult fares cross-subsidise the discounted ones.

Figure 4.2 Change in real terms of daily Opal caps



Source: TfNSW historical data on fares; IPART analysis

Figure 4.3 Change in real terms of weekly Opal caps



Source: TfNSW historical data on fares; IPART analysis

Box 4.1 Gold Opal card

Stakeholders have told us the importance of the Gold Opal card for the social inclusion and well-being of seniors and pensioners. Accessible public transport allows seniors to benefit from opportunities for leisure, social recreation, sport, health, and volunteering. Seniors who have lost eligibility to hold a driver's licence, or those who are temporarily unable or less able or confident driving also rely on public transport for their day-to-day life.

We note that under the current eligibility criteria, both seniors and pensioners can access Gold Opal discounts.

Current Commonwealth Age Pension arrangements support those who are over retirement age and financially disadvantaged. Income and asset tests determine whether a senior is eligible for pension payments; other retirees self-fund their retirement through personal savings, superannuation, and other sources of income.

We consider that if Gold Opal concessions are intended to recognise financial vulnerability, pension payment eligibility is a better proxy than pension age. For example, the proportion of people older than 65 that do not receive pension payments and are in the bottom 20% of relative disadvantage is less than 1%.

The Opal gold card is a generous and popular ticketing option for seniors. It improves access and affordability for disadvantaged seniors that face cost barriers to public transport. Eligibility for the card is broad and does appear to capture seniors who may have greater capacity to pay. This may be a deliberate government policy for simplicity and ease of administration, or an attempt to improve transport access to seniors who may have less ability to drive as they age or are more vulnerable to social exclusion or would be reliant on other members of the community for transport.

Without clarity on the policy objectives of the Gold Opal card it can be difficult to make recommendations on the appropriate level and eligibility of the card. Clarifying the policy objectives of the discount will assist setting the appropriate eligibility criteria and discount level of the card.

Ultimately, decisions about concession levels and eligibility are matters of social policy judgement for the Government. We consider that the Gold Opal eligibility policy is providing a broader benefit than simply providing affordable and accessible fares for disadvantaged groups.

We acknowledge that the Gold Opal policy might be aimed at recognising seniors as a group at risk of social exclusion, who may be otherwise dependent of other members of the community for transport, and incentivise greater public transport use even among seniors who are able to drive. The Gold Opal cap also provides a consistent fare, which improves simplicity and stability for its users.

We are not making recommendations about the eligibility of the Opal Gold card; however, we have recommended that the Government consider the various caps, rebates and discounts so that the fairness and relativity of the system is preserved over time. When TfNSW increases fares within the maximum set by IPART, we consider that the Gold Opal daily cap should be linked to other elements of the fare structure and should also be subject to these changes.

This is similar to the way concession fares are set at 50% of adult fares and caps and would reflect changes in fares and other economic indicators (such as pensions, wages, and costs of living). Our recommendations would ensure the benefits of a simple, low-cost fare structure continue to provide benefits for all seniors.

A Gold Opal cap set at 50% of the Concession Opal daily cap (approximately 25% of the Adult daily cap) would retain the simplicity of the current Opal Gold ticket while better reflecting its place within the overall fare structure. This means that the cap on Fridays, weekends and public holidays would be lower than the current daily cap, but travelling on Mondays to Thursdays would be capped at a higher rate.

At current Concession Opal cap rates, that would be $4.68 a day Monday to Thursday and $2.34 a day Friday, Saturday, Sunday and public holidays. This is comparable to a 10-km train return trip at concession fares ($4.20 in total at peak time, or $2.94 off-peak).

Weekly travel would also be capped at half the rate of the Concession weekly cap. This means the maximum weekly travel cap would fall from $17.50 to $12.50.

Concession fares for individuals facing financial disadvantage

People accessing JobSeeker payments are eligible for Opal concession cards, but only if they receive the maximum rate of benefits. We consider this excludes a significant number of disadvantaged people who would benefit from concession fares.

As JobSeeker payments include mutual obligation requirements, unemployed recipients have to travel frequently to job interviews and job opportunities. Even a few hours of casual work per week can impact eligibility for the maximum rate of benefits (any dollar earned above $150 per fortnight reduces the rate of JobSeeker payments). Currently, 30% of JobSeeker recipients do not receive the maximum rate. People seeking jobs might also find temporary employment and later on go back to JobSeeker payments. This means they would lose eligibility for concession cards. Concession cards for JobSeeker recipients have a validity of 90 days and must be renewed if still eligible.

We consider the Health Care Card offered by the Commonwealth Department of Social Services is a good proxy for disadvantage and includes people that do not access concession fares. The people eligible for a Health Care Card are recipients of the following benefits[9]:

- ABSTUDY Living Allowance
- Austudy
- JobSeeker payment
- Parenting Payment (partnered)
- Special Benefit

- Youth allowance
- Mobility allowance if not getting disability support pension
- Maximum rate of Family Tax Benefit Part A
- Carer Payment for short term or irregular care less than 6 months
- Carer Allowance for a child younger than 16.

The card is valid for up to a year and must be renewed if eligible.

The Commonwealth Department of Social Services also offers a Low-Income Health Care Card to people deemed low income under an income and asset test. The current threshold for the income test is a weekly income of $769, or $1,315 for a couple. This is approximately half of the median income in Greater Sydney.

Box 4.2 Estimating the impact of expanding eligibility of Concession fares to holders of a Health Care Card

According to data from the Department of Social Services, in March 2024 there were approximately 233,000 Health Care Card holders within the boundaries of the Opal train network.

Many of these Health Care Card holders are already eligible for Opal Concession cards if they receive the maximum rate of Jobseeker payments. At the national level, approximately 75% of JobSeeker recipients are on the maximum rate.

We calculate that there are approximately 150,000 JobSeeker recipients living within the Opal network, 112,000 of which receive the maximum rate. This leaves around 121,000 Health Care Card holders within the Opal network that do not qualify for Concessions on the basis of JobSeeker payments. Subtracting Health Care Card holders that would qualify for concessions for age (children younger than 16 and seniors older than 65) leaves approximately 112,000 card holders that would benefit from the proposed concession eligibility extension.

We note that these calculations rest on a number of assumptions, and likely overstate the number of Health Care Card holders not eligible for Concessions since recipients could qualify for Concessions through other criteria. However, we believe that this number is a reasonable approximation of the impact of extending Concession eligibility to Health Care Card holders.

Estimating the revenue impact of this recommendation is complex. While TfNSW would lose the revenue associated with the expanded discounts, it could also gain revenue through additional trips. Many disadvantaged individuals that were previously unable to use public transport might now sign up for a Concession card and use the Opal system.

Box 4.2 Estimating the impact of expanding eligibility of Concession fares to holders of a Health Care Card

We calculate the *maximum* possible revenue loss for TfNSW as a result of extending concession eligibility under the following assumptions:

- 30% of newly eligible Concession cards make new trips as a result of the discount, increasing revenue. 70% of the newly eligible cards (78,000) make the same set of trips so that fare revenue is reduced. We used these proportions for a similar calculation in our previous review in 2020.
- Newly eligible Concession card holders followed the average travel patterns of Adult users prior to the discount and retain them after the eligibility extension. This means that since the average Adult weekly expenditure in 2024 was $23, if these individuals got a 50% discount on their fares, they would reduce revenue by $11.5 per person as a result.

The resulting total revenue impact would be approximately $900,000 per week. We note that this represents a maximum value that is likely much higher than the effective amount. To derive this value, we relied on assumptions that significantly simplify the scenario under consideration.

We also note that in other jurisdictions, transport authorities work with community organisations to provide better access to people facing disadvantage. For example, Public Transport Victoria sells 1-Day, 7-Day and 30-Day Travel Passes to approved community service organisations and education providers, who then issue them to their clients free of charge.

We note that in other sectors such as water and other utilities Community Service Obligations and other assistance programs are delivered in partnership with accredited community organisations to customers facing disadvantage.

In our 2020 review, we recommended the NSW Government consider trialling similar schemes to provide discounted short-term travel passes to assist people experiencing vulnerability through working with community organisations. We are seeking community feedback on this option to better understand the potential and feasibility of such schemes.

Seek Comment

1. How can Transport for NSW work with community services organisations to provide short-term assistance to people experiencing vulnerability with their transport needs?

Concession fares for people living with a disability

Concessions and discounts available to improve mobility for people living with a disability include:

- Vision impaired people can apply for a Travel Pass that entitles them to free public transport on the Opal network.
- Under the National Companion Card Scheme administered by the Department of Communities and Justice, companions of people that require a carer travel for free on public transport.
- Under the Taxi Transport Subsidy Scheme, NSW residents that are unable to use public transport because of a severe and permanent disability are eligible for discounted taxi fares[10].

There are other groups of people living with disabilities or other health issues that might benefit from public transport concessions.

Some travellers are unable to drive because they are not eligible for an NSW Drivers' Licence or are not able to renew it. Conditions that can affect fitness to drive include vision and eye disorders, sleep disorders (such as narcolepsy), neurological conditions (such as dementia, epilepsy, Tourette's Syndrome), cardiovascular conditions, psychiatric conditions or neurodivergences (such as schizophrenia, personality disorders, ADHD, Autism Spectrum Disorder), diabetes, cognitive impairment, and musculoskeletal conditions (such as paralysis of limbs).[11]

People that cannot drive rely on either public transport or private transport with a carer or companion for their daily needs. Some people living with disabilities or health impairments might not have the option of travelling with a carer. Reducing reliance on carers might also have other benefits, such as reducing the need for companions to take time off work or forego employment opportunities.

People with disabilities are at greater risk of socioeconomic disadvantage. Analyses by the Australian Institute of Health and Welfare[12] and ACOSS[13] show that on average, people living with disability are less likely to receive income from wages or salary and are more likely to live in poverty.

Some people are not able to use the Opal ticketing system due to their disability, despite being able to use public transport otherwise. For example, certain physical and cognitive impairments prevent people from being able to tap-on/off at stations or on public transport. In our 2020 review, we recommended TfNSW to develop free passes for these travellers.

Transport authorities in other jurisdictions provide concessions for people living with disabilities. For example, in Victoria recipients of the Disability Pension[m] can access concession fares, and people whose disability prevents them from using the ticketing system can apply for a free transport pass. In other transport systems such as London's, concessions on the basis of disability are available to those who cannot obtain or renew a driver's license, regardless of income.

[m] The Disability Pension, administered by the Commonwealth Department of Social Services, provides support for people whose disabilities prevent them from working.

People living with a disability are a heterogenous group that includes a variety needs and circumstances. We acknowledge the complexity in designing policies to improve access and use of public transport for people living with a disability. We also note that our review only deals with fares and does not look at other components of accessibility such as accessible infrastructure.

Before we design recommendations on concessions or other options for people with disabilities, we would like to hear from the community on transport needs and challenges and how to ensure affordability and accessibility for other disadvantaged groups. This feedback will assist us in developing a better idea of the challenges and needs this group faces.

Seek Comment

2. What are the challenges people with disability face when using the Opal system to pay for public transport?

[1] Australian Automobile Association, Transport Affordability Index, September 2023
[2] Productivity Commission, Public transport pricing research paper, December 2021, p 119.
[3] Gomez-Lobo, A., Affordability of Public Transport A methodological clarification, Journal of Transport Economics and Policy, September 2011, pp 437-456
[4] Institute of Transport and Logistic Studies (ITLS), Transport Opinion Survey, March 2023, p 6.
[5] Bigi, F. and Viti, F, Evaluating the impact of Free Public Transport using agent-based modelling: the case-study of Luxembourg, September 2023
[6] European Commission, Estonia's free county public transport did not fulfill goals, March 2021
[7] Brey, J., What can cities learn from Kansas City's Fare-Free Transit program?, Governing, November 2022
[8] Parliament of Victoria Legislative Council, Inquiry into expanding Melbourne's Free Tram Zone, November 2020, p xiii, p5-9, p20
[9] Australian Government Department of Social Services, Health Care Card, accessed April 2024
[10] Transport for NSW, Taxi Subsidy Scheme, accessed June 2024
[11] Austroads, Assessing Fitness to Drive, June 2022
[12] Australian Institute of Health and Welfare, People with disability in Australia, accessed June 2024
[13] Davidson, P., Saunders, P., Bradbury, B. and Wong, M., Poverty in Australia, 2018. ACOSS/UNSW Poverty and Inequality Partnership Report No. 2, p 58

Appendices

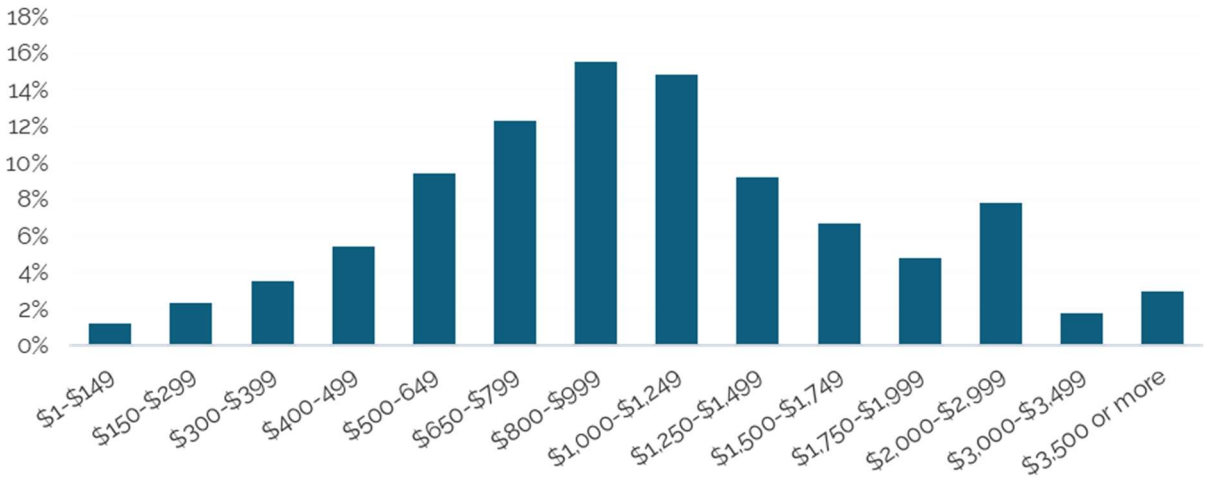
A Analysis of income characteristics of public transport commuters

Relationship between income and public transport use

We investigated whether people on higher (lower) income are more (less) likely to commute to work via public transport. The cheaper cost of public transport relative to driving could suggest that lower income brackets are associated with higher public transport use. However, the better availability of public transport services in more advantaged areas closer to the CBD could have the opposite effect.

For each income band, we calculated the proportion of Census respondents that reported travelling to work via public transport. This proportion is highest among middle-income earners (Figure A.1), consistently to a similar analysis by the Commonwealth Productivity Commission.[14]

Figure A.1 Proportion of commuters travelling via Public Transport by weekly income



a. Income in this analysis refers to gross weekly income, inclusive of employee income, investment income, private transfers, government pensions and allowances

Source: ABS 2021 Census Data; IPART analysis

We consider this largely reflects the geographical distribution of Sydney's public transport network. Those who live in areas closer to the CBD can generally access more varied services, more frequently, and travel shorter distances to work if they travel to the CBD.[n] Higher incomes are also associated with white-collar jobs that are less likely to require a car for work-related activities.

[n] We note that this analysis is based on Census data from 2021, when the COVID-19 pandemic and associated restrictions had changed the ordinary use of public transport.

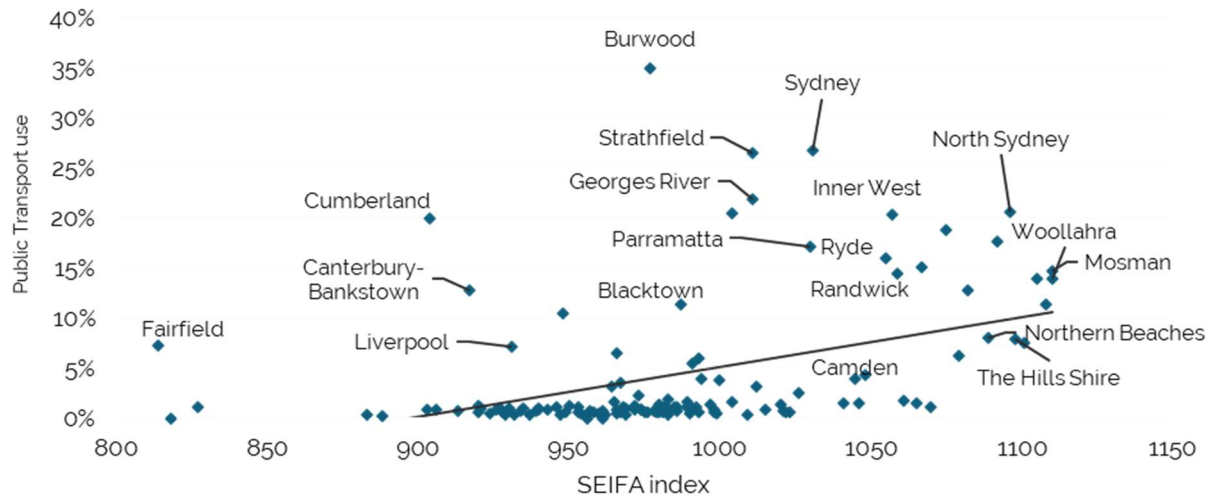
Relationship between location and public transport use

We investigated the relationship between location and public transport use to verify the hypothesis above. We found that the relative wealth of an area and its proximity to the CBD are correlated with public transport use.

We calculated the share of commuters taking public transport to work for each LGA in Greater Sydney and the corresponding Socio-Economic Index for Areas (SEIFA)[b] (see Figure A.2), We found higher income areas typically have a higher share of employees commuting to work via public transport. In general, those areas with higher-than-expected public transport use (i.e. above the trend line) such as Burwood, Strathfield, Parramatta, Blacktown, and Liverpool LGAs, enjoy better public transport connections than areas within the same distance to the CBD due to major transport junctions and express train services. Similarly, LGAs closer to the CBD see a greater share of employees commuting via public transport (Figure A.3).

We also found that areas closer to the CBD have a higher proportion of employees working from home (Figure A.4), which is generally associated with higher income jobs.

Figure A.2 Greater Sydney LGAs by SEIFA index and proportion of employees using Public Transport

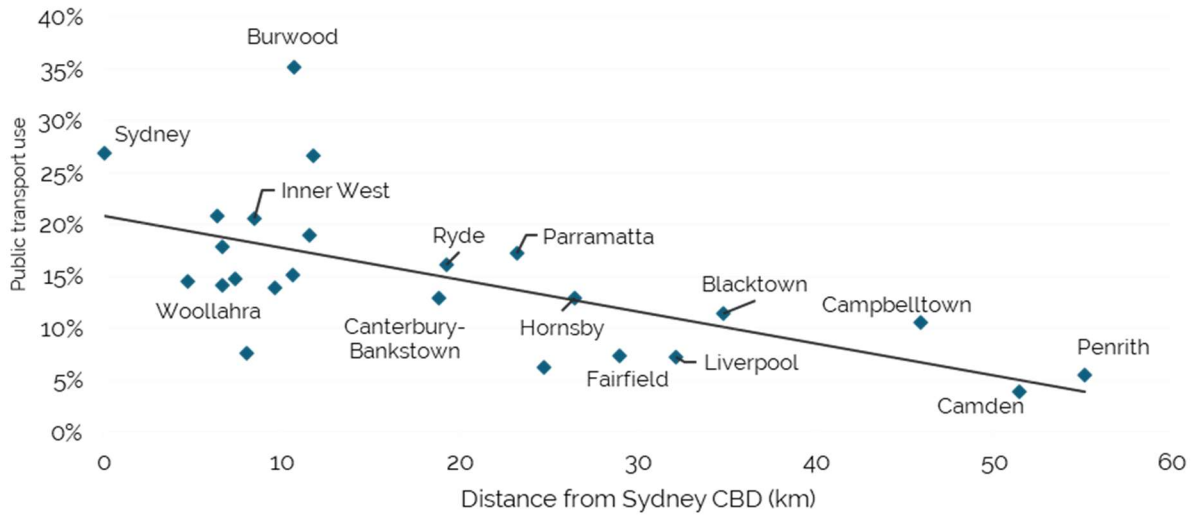


b. The Socio-Economic Indexes for Areas (SEIFA) is a product developed by the ABS that ranks areas in Australia according to relative socio-economic advantage and disadvantage. A higher index corresponds to higher advantage.

Source: ABS 2021 Census data; IPART analysis

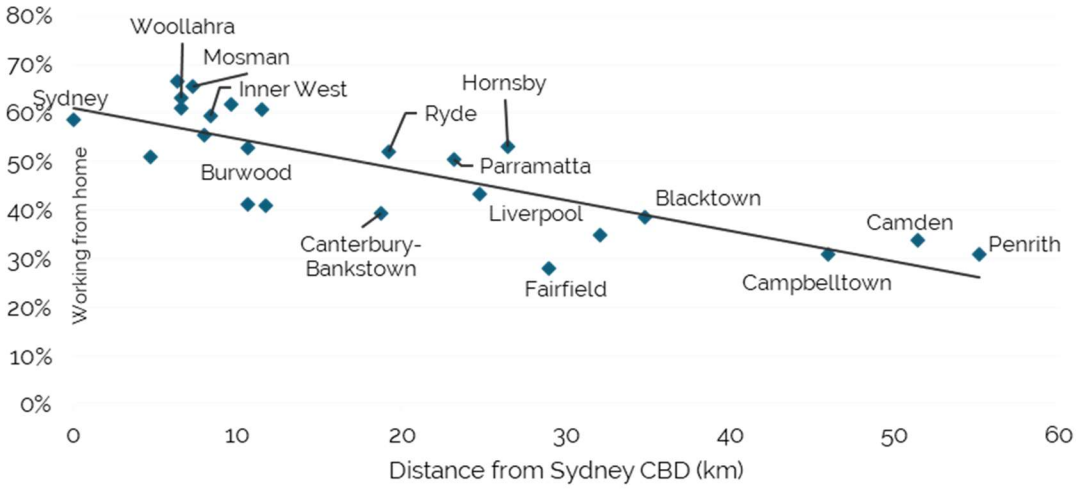
[b] The Australian Bureau of Statistics develops a SEIFA index to indicate the relative (dis)advantage of an area, based on metrics such as median income, median educational attainment, median house price, etc.

Figure A.3 Greater Sydney LGA by proportion of employees using public transport to work and distance to the CBD



Source: ABS 2021 Census data; IPART analysis

Figure A.4 Greater Sydney LGAs by proportion of employees working from home and distance to the CBD



Source: ABS 2021 Census data; IPART analysis

Relationship between income and commuting mode

The geographic variation of income and public transport availability makes it difficult to infer the relationship between personal income and public transport use. To partially control for this, we analysed the average income of those who do take public transport to work (as opposed to the analysis above where, given an income, we calculated the proportion of public transport users). We calculated average income for different areas and compared it with the income of drivers (Figure A.5).

We found that the average weekly income for commuters that take public transport to work is generally lower than those who drive to work. This is consistent with the greater costs of car ownership.

We also found that this gap is more pronounced for areas closer to the CBD and decreases for areas further away. This seems to suggest that the choice between driving and using public transport is influenced by personal income for areas close to the CBD, but not for outer areas. The choice to drive a car for residents in these areas might be at least partially dictated by the lower availability of public transport services. Moreover, public transport is always cheaper than driving but less so over longer distances, which attract higher fares. This could potentially influence the trade-off between driving and taking public transport.

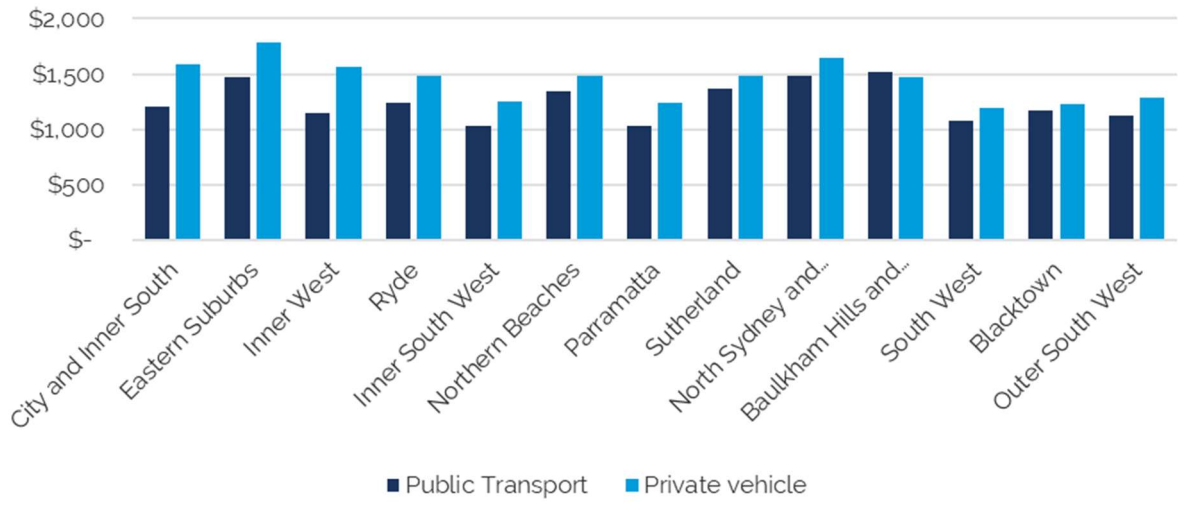
Finally, we found that the average income of public transport users is almost constant across areas. This is in contrast with the other parameters in this analysis, such as SEIFA, public transport usage, rate of working from home, income of drivers, which all increase the closer we get to the CBD. In other words, while the relative wealth of an area increases with proximity to the CBD, the relative wealth of public transport commuters does not.

This suggests that most of the variation of public transport usage across income brackets can be attributed to the effect of location on service availability and commuting patterns.

Another implication is that, since the income of public transport users is roughly the same in inner and outer areas, long-distance commuters might spend a higher proportion of their income for public transport since they pay higher fares. However, we note there can also be trade-offs between housing costs and transport costs in areas further away from CBDs.

In addition, our findings suggest that while the relative advantage of an area is generally a good indicator of the relative advantage of its residents (at least on average), this might not be the case for public transport commuters. This means that even in inner city areas public transport might represent a cost-effective option for those who cannot afford or are not able to drive.

Figure A.5 Greater Sydney Statistical areas by distance to the CBD and median weekly income – private vehicle vs public transport users



a. Income refers to average weekly personal income. The ABS provides income distribution by income band. Income in this chart has been calculated as a weighted average (number of people in each band x mid-point of each band).
Source: ABS Census Data, IPART Analysis

[14] Productivity Commission, Public transport pricing research paper, December 2021, p 120