

## **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:

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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:

### Review of maximum Opal fares until July 2028

Independent Pricing and Regulatory Tribunal PO Box K35

Haymarket Post Shop, Sydney NSW 1240

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

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website.

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# Our draft determination sets a simple and flexible fare structure

Under the *Passenger Transport Act 2014* the Minister for Transport may refer a public passenger service to IPART for a determination or recommendation of appropriate maximum fares.

The Minister has asked IPART to determine appropriate maximum fares for Opal public transport services until 30 June 2028.<sup>a</sup> In making a determination IPART must consider matters set out in the Act and any other matters specified in the referral.

As discussed in our Draft Report, we have established 6 fare setting objectives to summarise the matters we are required to consider as part of this review.<sup>b</sup> These are:

- 1. Fare structures are simple and flexible
- 2. Fares support better travel options
- 3. Fares ensure that public transport is accessible
- 4. Fares maximise benefits to the community
- 5. Fares are set to support the financial performance of the public transport network
- 6. Fares create value for customers.

This information paper sets out our draft decisions on the determination for maximum Opal fares until June 2028 and discusses how our Draft Determination has taken the fare setting objectives into account. We consider that our Draft Determination supports the delivery of our fare setting objectives, particularly that fare structures are simple and flexible, and fares support better travel options.

We will consider all the feedback we receive on our draft decisions and recommendations, before releasing our Final Report and Determination in October 2024.

Our Determination will come into effect on 1 December 2024. However, the timing and level of actual fare changes below the maximum will be decided by the NSW Government. Any discounts, concession fares, travel rewards, travel caps or other fares set below the appropriate maximum fares are not set by our determination but also decided by the Minister and Transport for NSW.

<sup>&</sup>lt;sup>a</sup> The referral for this review is available on our website.

b The fare setting objectives are for convenience only. IPART has had regard to each of the matters contained in section 124 of the *Passenger Transport Act 2014* and the referral from the Minister.

## 1.1 Our draft decisions on the form of determination

## Our draft decisions are:



- 1. To determine appropriate maximum fares for Opal services in such a way that the maximum fares are either:
  - a. The maximum fares set in Part 2 of the Draft Determination for the default distance bands in Table 1.2 to Table 1.5; or
  - b. The maximum fares determined by Transport for NSW (TfNSW) consistent with Part 3 of the Draft Determination for alternative distance bands provided that the deemed average fare does not exceed the maximum average fare of \$4.76 (ex GST in \$2024-25).



2. To set maximum fares under Part 2 for single mode journeys using the default distance bands as shown in Table 1.2 to Table 1.5.



3. To set maximum fares for on demand services at the same level as the maximum fares for single mode journeys for the relevant mode of transport.



4. That the maximum fares in the Draft Determination are inflated by the change in the All groups Consumer Price Index (CPI) for Sydney in each year over the determination period.



5. That the 'CBD increment' (which adds a distance specified by TfNSW – currently 3.21km – to the distance travelled for train trips that start or finish in the CBD) be removed.



6. That the distance of any trip by train is determined by the shortest distance by rail between the departure point and the destination point.

## 1.1.1 We have determined a draft methodology to fix maximum fares

Part 3 of our Draft Determination describes our draft methodology to fix maximum fares for the period from 1 December 2024 to 30 June 2028. Under this methodology, Transport for NSW (TfNSW) has discretion over fares and the fare structure as long as the deemed average fare, which is calculated by multiplying each value in the distribution table (Table 3.2) in our Draft Determination by the corresponding fare to which that value relates and adding together all of the products, is lower than the maximum average fare shown in Table 1.1.

## Table 1.1 Maximum average fare (\$2024-25, excluding GST)

Service Maximum fare 2024-2028

Maximum average fare \$4.76

We consider that this methodology is appropriate as it would provide TfNSW with flexibility to tailor product and fare offerings to meet customer preferences, account for the introduction of new services, and manage uncertainty in the post COVID-19 environment.

Under our Draft Determination, the maximum fares would remain constant in real terms over the period from 1 December 2024 to 30 June 2028. This allows TfNSW flexibility to set its own price path over the period.

The maximum fares would be inflated by the change in All groups CPI for Sydney in each year of the determination period. This enables the maximum fares to change over the 4-year period in line with actual inflation. We consider this is important given the volatility of inflation in recent years. Maximum fares would continue to be inflated by the change in the All groups CPI for Sydney each year after the end of the determination period until the Final Determination is revoked or replaced.

## 1.1.2 Part 2 of our draft determination presents maximum fares for the default distance bands

Part 2 of our Draft Determination shows how our draft methodology applies for the default distance bands set out in the left-most column of Table 1.2 to Table 1.5. The maximum fares presented in Table 1.2 to Table 1.5 apply by default unless TfNSW chooses to uses distance bands other than the default distance bands.

Our 2020 Determination of maximum Opal fares also includes Schedule 1, which provides maximum fares where customers are charged using the default distance bands, and Schedule 2, which allows for the use of a different set of distance bands by providing for a maximum deemed average fare across all Opal services.
TfNSW has been using Schedule 1 to set fares over the period from 2020 to 2024.

Table 1.2 Train services (\$2024-25, excluding GST)

Distance band (km)	Maximum fare July 2024 <sup>a</sup>	Draft maximum fare 2024-2028	% change
O to ≤ 10	\$4.14	\$4.17	1%
> 10 to ≤ 20	\$5.09	\$5.30	4%
> 20 to ≤ 35	\$5.94	\$6.09	3%
> 35 to ≤ 65	\$7.82	\$8.13	4%
> 65	\$10.08	\$10.45	4%

a. Maximum fares adjusted to include Inflation for the 2024-25 year as allowed under the 2020 determination if not replaced prior.

## Table 1.3 Bus services (\$2024-25, excluding GST)

Distance band (km)	Maximum fare July 2024ª	Draft maximum fare 2024-2028	% change
0 to ≤ 3	\$3.02	\$3.02	0%
> 3 to ≤ 8	\$4.33	\$4.40	2%
> 8 to ≤ 20	\$5.65	\$5.65	0%
> 20	\$6.03	\$6.03	0%

a. Maximum fares adjusted to include Inflation for the 2024-25 year as allowed under the 2020 determination if not replaced prior.

## Table 1.4 Light rail services (\$2024-25, excluding GST)

Distance band (km)	Maximum fare July 2024 <sup>a</sup>	Draft maximum fare 2024-2028	% change
0 to ≤ 3	\$3.02	\$3.02	0%
> 3 to ≤ 8	\$4.33	\$4.40	2%
> 8 to ≤ 20	\$5.65	\$5.65	0%
> 20 to ≤35 <sup>b</sup>	\$6.03	\$6.03	0%
>35t o ≤65 <sup>b</sup>	\$7.82	-	n/a
>65 <sup>b</sup>	\$10.08	-	n/a

a. Maximum fares adjusted to include Inflation for the 2024-25 year as allowed under the 2020 determination if not replaced prior. b. We previously set light rail fare bands up to 65km. The majority of light rail trips are less than 8km. The current light rail network and the planned future stages do not appear to require distance bands greater than 20km. We have decided not to set fares for longer distance light rail trips. The longest distance band within our determination will be set at >20km

## Table 1.5 Ferry services (\$2024-25, excluding GST)

Distance band (km)	Maximum fare July 2024 <sup>a</sup>	Draft maximum fare 2024-2028	% change
0 to ≤ 9	\$6.97	\$7.19	3%
>9	\$8.66	\$9.00	4%
Newcastle ferry service	\$3.02	\$3.23	7%

a. Maximum fares adjusted to include Inflation for the 2024-25 year as allowed under the determination if not replaced prior.

Under the draft maximum fares in Part 2 single mode journeys would vary by mode. This is consistent with the current fare structure. We consider that mode-specific fares are appropriate because we found that the efficient costs of delivering services, and the external costs and benefits, vary by mode. For more information, see Technical Paper - Modelling socially optimal fares. Mode based fares provide price signals to passengers and help to recover some of the costs of service provision. Where passengers have a choice between modes, price signals enable passengers to weigh up their willingness to pay and perceived value of each mode when making decisions about how they travel.

Additionally, draft maximum fares in Part 2 single mode journeys increase with distance travelled. This is also consistent with the current fare structure. We consider that it is appropriate for customers who take longer journeys to pay more than those who take shorter journeys to reflect the additional costs incurred. Our socially optimal fares analysis also found that socially optimal fares increase with distance travelled.

## 1.1.3 Maximum fares for service replacement buses and on demand services

Our Draft Determination sets the maximum fare for a service replacement bus at the maximum fare that would apply if the service was provided by the usual mode. This is consistent with TfNSW's current practice. We consider this is particularly relevant for when buses will replace trains for up to 12 months while the T3 Bankstown Line is converted to metro standards.<sup>1</sup>

Under this arrangement when a customer is required to get off a train and onto a service replacement bus, the train trip and subsequent service replacement bus trip are considered as one journey with one fare provided that the transfer between the train and the service replacement bus occurs within 60 minutes. This also applies when service replacement buses replace other modes of public transport i.e. metro, light rail and ferry services. This ensures that customers do not pay more out-of-pocket when there is planned or unplanned maintenance that requires them to switch from their usual mode to a service replacement bus. We also note that while our Draft Determination sets the maximum fares for service replacement buses, it is at the discretion of TfNSW to set lower fares, or to not charge a fare if it is administratively difficult to do so.

We have also made a draft decision to set the maximum fares for on demand services at the same level as the maximum single fares for the relevant mode of transport. This is consistent with the approach taken in our 2020 Determination.

d Under Opal trip advantage, if you make several trips using the same mode of transport, and transfer within 60 minutes of your last tap off, it's one journey with one fare. Except for the Manly ferry, where it's 130 mins (2 hours and 10 minutes) from tap on.

## 1.1.4 We made draft decisions to remove the CBD increment and define the distance of any trip by train as the shortest distance by rail

We have made a draft decision to remove the 'CBD increment' from our Draft Determination. Currently, for train travel in or out of the Sydney CBD, the trip distance is measured as the distance from the tap-on station to a 'gateway station' (Central, Wynyard or Kings Cross depending on the line) plus a CBD increment of 3.21 km. This is a historical legacy of the paper ticket system in place prior to 2016 which allowed customers with a 'city' destination to exit at any city station and return from any other. The option to travel to and from a 'city' destination is no longer needed as Opal fares are based on the actual station of entry and exit.

Under our Draft Determination, the distance of any trip by train<sup>e</sup> would be defined as shortest distance by rail between the departure point and the destination point. We note that this is consistent with how the distance for most train trips is currently determined, though some exceptions apply.<sup>f</sup>

This means that under our Draft Determination, the distance travelled for train trips that start or finish in the CBD would be based on the shortest distance by rail between the departure station and the destination station, to reflect the actual distance travelled. Our analysis suggests that this could lead to lower fares for some customers travelling to or from the CBD where the additional 3.21km had previously placed them in a higher distance band. Our analysis also suggests that this could lead to higher fares for a small subset of customers that would move from a lower distance band to a higher distance band as a result of removing an automatic increment of 3.21km and applying the shortest distances by rail between stations.

We propose that the removal of the CBD increment be implemented in a revenue neutral way by spreading this across all train trips taken on the Opal network. We modelled the impact of the this and found that it would lead to an increase of around 3 cents to the maximum fare per train trip.<sup>9</sup>

We consider that our draft decisions to remove the CBD increment and define the distance of any trip by train as the shortest distance by rail support a simple fare structure and improve fairness by ensuring that all customers are charged on the same basis, that is, using the shortest distance by rail. We also consider that the upcoming determination period is the appropriate time to adopt a harmonised approach for all train trips, given the introduction of several new stations within the CBD with the opening of the new metro line between Chatswood to Sydenham.

Appendix C of this information paper summarises these changes, as well as other main changes between IPART's 2020 Determination of Maximum fares for Opal Services and our Draft Determination.

<sup>&</sup>lt;sup>e</sup> Includes a metro service provided using a train and an on demand service provided using a train.

f TfNSW has advised that special rules currently apply for city stations, Macarthur/Campbelltown, Wirragulla/Wallarobba, Richmond/East Richmond and Olympic Park. There is also an implied direct connection between the Broadmeadow and Waratah stations, which reduces the distance across this junction by 1.12km.

<sup>9</sup> Does not account for any changes to the shortest distance by rail between stations and the introduction of new stations as a result of the new metro line between Chatswood and Sydenham.

## 1.2 We are seeking feedback to inform our final determination

We want to hear from you on our Draft Determination and Draft Report, including on the following specific matters.

### We are seeking comment on:



 Under our Draft Determination maximum fares would apply from 1 December 2024 and remain constant in real terms. This provides TfNSW with flexibility to set its own price path over the determination period.

What are your views on allowing TfNSW flexibility to set its own price path over the determination period? Should IPART set the price path instead (for example, specifying the allowable real increases in each year of the determination) or apply additional constraints to individual fares?



2. Under our Draft Determination, maximum fares stay constant in real terms and TfNSW can increase fares by actual CPI each 1 July. This is different from our approach in 2020 when we included an estimate of future CPI in the determined fares.

What are your views on whether estimated future CPI should be included in fares, or allowed to be included based on actual inflation experienced?



3. We have made a draft decision to remove the CBD increment. This could be implemented in a revenue neutral way by recovering foregone revenue across all train trips taken on the Opal network, through an increase of around 3 cents to the maximum fare per train trip.

What are your views on removing the CBD increment and recovering the foregone revenue through all train trips taken on the Opal network?

As an alternative to the distance-based CBD increment, are there any costs specific to busy locations (e.g. CBD stations) that should be reflected in fares, possibly as an additional charge?

## 2 We have been asked to determine appropriate maximum fares for Opal services

This section discusses the scope of the referral we have received from the Minister for Transport and how our current determination applies.

## 2.1 What are Opal services?

For this review we will refer to all the services for which we will set maximum fares for as Opal services. These are described in Box 2.1.

## Box 2.1 What are Opal services?

For the purposes of our Determination, Opal services means the following services:

- Train services operated by Sydney Trains under the authority of a Passenger Service Contract with TfNSW.
- Train services operated by NSW Trains operated under the business name NSW TrainLink Intercity under the authority of a Passenger Service Contract with TfNSW.<sup>h</sup>
- Train services operated by Sydney Metro under the authority of a Passenger Service Contract with TfNSW.
- Sydney Ferries network services operating under the authority of a Passenger Service Contract with TfNSW and Ferry services operating between Manly and Circular Quay under the authority of a Passenger Service Contract with TfNSW.
- Buses, Light rail and Ferry services operated by Newcastle Transport under the authority of a Passenger Service Contract with TfNSW.
- Bus services operated under the authority of a Sydney Metropolitan Bus Service Contract with TfNSW.
- Bus services operated under the authority of an Outer Sydney Metropolitan Bus Service Contract with TfNSW.
- Light rail services operated by Sydney Light Rail, including Inner West and CBD and South East light rail, under the authority of a Passenger Service Contract with TfNSW.
- Light rail services in Parramatta, under the authority of a Passenger Service Contract with TfNSW.
- On demand services in Metropolitan and Outer Metropolitan Areas operated under the authority of a Passenger Service Contract with TfNSW.

<sup>&</sup>lt;sup>h</sup> A process of transferring intercity services from NSW TrainLink to Sydney Trains began in 2023.

## Box 2.1 What are Opal services?

Source: Minister for Transport, Referral of the Opal maximum fares for review, 5 September 2023.

There are some services in NSW, not included in this list, that accept Opal cards as a form of payment. OpalPay allows customers to pay for travel using their Opal card on participating transport services, including selected private ferries and on demand public transport. OpalPay fares are not the same as standard Opal fares and OpalPay trips do not count towards Opal travel benefits and discounts.<sup>2</sup> Services not included in Box 2.1, such as private ferry services, are not considered to be Opal services for this review and the maximum fares are not set by our Opal fares determination.

We understand that it is also possible for a service to be an Opal service as described by Box 2.1 and for the service not to accept Opal cards as a form of payment. The F10 Blackwattle Bay ferry is an example of an Opal service that does not currently accept Opal card payments. This was previously an on demand service that was made permanent in December 2022. As the F10 Blackwattle Bay is an Opal service, fares must not exceed the maximum fares under our determination. However, as Opal card payments are not accepted, trips taken on the F10 Blackwattle Bay do not count towards Opal travel benefits and discounts. This example shows that sometimes there may be a delay between when a new Opal service is introduced and when the service can be fully integrated into the Opal ticketing system.

## 2.2 Our Determination applies to regulated fares

Our Determination sets appropriate maximum fares for Opal services paid for through regulated fares, which means a payment made using an Opal card or any approved payment device for a single trip and includes the whole amount payable for that trip apart from any Airport Station Access Fee and GST.

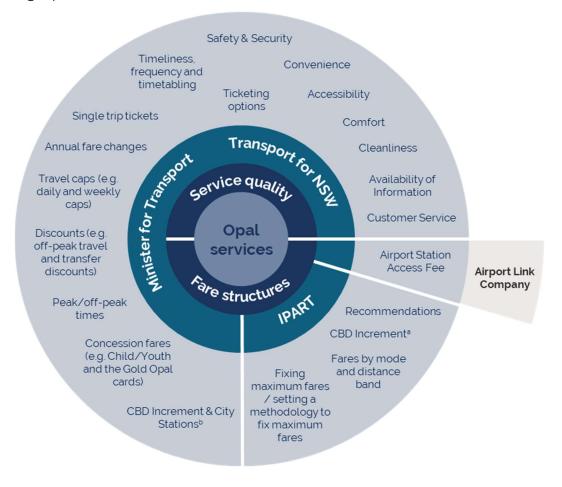
Our Determination does not impose any service standards on Opal services. This is because service quality and matters related to the performance of Opal services are managed by the Minister and TfNSW. The Minister and TfNSW are also responsible for determining parts of the Opal fare structure including:

- The timing and level of annual fare changes below the maximum fares determined by IPART.
- Concession fares such as child and youth fares or pensioner fares.
- Discount fares such as the off-peak travel discount or the transfer discount.
- Travel caps such as the daily cap or the weekly cap.
- Any fare for a trip in respect of which a customer is required to tap on and tap off, but neglects either to tap on or to tap off.
- A single trip ticket. These are available at select stations or wharves from top up and single trip ticket machines and are designed as a backup option if customers do not have an Opal card or use contactless payments.<sup>4</sup>

As noted above, the regulated fares set by IPART's Determination do not include the Airport Station Access Fee which is charged by the Airport Link Company who privately-owns the airport stations. This fee is imposed when a passenger commences or concludes their trip at either the Domestic Airport train station or the International Airport train station.<sup>5</sup>

Figure 2.1 summarises the responsibilities of IPART, the Minister and TfNSW, and the Airport Link Company in providing Opal services and determining Opal fares.

Figure 2.1 Roles and responsibilities in the provision of Opal services and determining Opal fares



a. IPART's 2020 Determination states that for any trip using a train, the distance of the trip is the sum of the distance by rail between the departure point and the destination point; and if the trip is a CBD trip, the CBD increment.

## 2.3 Fares under our 2020 Determination

In our last review of Opal fares from 1 July 2020 we set a 2-part methodology where:

 Schedule 1 provides maximum fares where customers are charged using the default distance bands.

b. TfNSW has discretion over the distance of the CBD increment and the ability to specify train stations as city stations, which determines if a trip is a CBD trip.

 Schedule 2 allows for the use of a different set of distance bands by providing for a maximum deemed average fare across all Opal services. The maximum deemed average fare is consistent with the average fare which IPART estimates would result from the use of the default distance bands.

This section presents the fares set by our 2020 Determination under each schedule.

Our 2020 Determination continues to apply beyond 30 June 2024 until it is revoked or replaced. Maximum fares are to be inflated by multiplying the current fares by the annual change in inflation from 1 July 2024.

## 2.3.1 Schedule 1

Under Schedule 1 of the 2020 Determination, we set multiple maximum fares for Opal services, dividing up the services by:

- mode of transport for example, setting different fares for travel by ferry and travel by bus
- distance travelled for example, setting different fares for a short trip and a long one; and
- geography for example, setting different fares for a ferry trip in Newcastle and a ferry trip outside Newcastle.

Tables 2.1 to 2.4 show the current Adult peak fare (as of July 2024) and the appropriate maximum fares in our 2020 Determination by mode of transport and default distance band.

Table 2.1 Train fares (incl. GST)

Distance band	Adult peak fare (July 2024)	2020 Determinationa
0-10km	\$4.20	\$4.55
10-20km	\$5.22	\$5.60
20-35km	\$6.01	\$6.53
35-65km	\$8.03	\$8.60
65+km	\$10.33	\$11.09

a. Fares have been adjusted for inflation and to include GST.

Source: Transport for NSW, Adult fares, accessed July 2024 and IPART, Final Determination – Maximum fares for Opal Services to apply until June 2024, February 2020, p 4.

<sup>&</sup>lt;sup>1</sup> This is defined as the CPI for the March quarter of the present year divided by the CPI for the March quarter of 2023, where the CPI means the All Groups index for the weighted average of 8 capital cities, published by the Australian Bureau of Statistics.

## Table 2.2 Bus fares (incl. GST)

Distance band	Adult peak fare (July 2024)	2020 Determination <sup>a</sup>
0-3km	\$3.20	\$3.32
3-8km	\$4.36	\$4.76
8-20km <sup>b</sup>	\$5.60	\$6.22
20+km	\$5.60	\$6.63

a. Fares have been adjusted for inflation and to include GST.

Source: Transport for NSW, Adult fares, accessed July 2024 and IPART, Final Determination – Maximum fares for Opal Services to apply until June 2024, February 2020, p 5.

## Table 2.3 Ferry fares (incl. GST)

Distance band	Adult peak fare (July 2024)	2020 Determination <sup>a</sup>
0-9km	\$7.13	\$7.67
9+km	\$8.92	\$9.53
Newcastle ferry service 0-3km	\$3.20	\$3.32

a. Fares have been adjusted for inflation and to include  $\ensuremath{\mathsf{GST}}.$ 

Source: Transport for NSW, Adult fares, accessed July 2024 and IPART, Final Determination – Maximum fares for Opal Services to apply until June 2024, February 2020, p 5.

## Table 2.4 Light rail fares (incl. GST)

Distance band	Adult peak fare (July 2024)	2020 Determination <sup>a</sup>
O-3km	\$3.20	\$3.32
3-8km	\$4.36	\$4.76
8-20km <sup>b</sup>	\$5.60	\$6.22
20-35km	\$5.60	\$6.63
35-65km	\$5.60	\$8.60
65+km	\$5.60	\$11.09

a. Fares have been adjusted for inflation and to include GST.

b. 8-20km, 20-35km, 35-65km and 65+km distance bands are combined into an 8+km distance band under the current fare structure. Source: Transport for NSW, Adult fares, accessed July 2024 and IPART, Final Determination – Maximum fares for Opal Services to apply until June 2024. February 2020, p 4.



## Trip distance is calculated differently for different modes

For trains and metro services, the trip distance is determined by the distance by track length between the departure point and the destination point and, if the trip is a CBD trip, the CBD increment.

For all other services, the distance band is determined by the straight-line distance from the point where the customer boarded to the point where the customer disembarked.

b. 8-20km and 20+km distance bands are combined into an 8+km distance band under the current fare structure.

Currently, when a customer makes a CBD trip, the trip distance is measured as the distance from the tap-on station to a 'gateway station' (Central, Wynyard or Kings Cross depending on the line and direction of travel) plus a CBD increment of 3.21km. A trip is deemed to be a CBD trip if it starts at a station which is not a city station and ends at a city station other than a gateway station; or if it starts at a city station other than a gateway station and ends at a station which is not a city station.

As the CBD increment is applied as an additional distance rather than as a dollar amount, it results in higher fare for passengers travelling to or from the CBD where the 3.21km increment would increase their trip distance to fall within the next distance band.

Figure 2.2 shows the stations where the CBD increment leads to an increase in the distance band when travelling to or from the city, and Box 2.2 presents an example of how the CBD increment only impacts certain trips.

<sup>&</sup>lt;sup>j</sup> City stations currently refer to the train stations of Central, Town Hall, Wynyard, Circular Quay, St James, Museum, Kings Cross, Martin Place, though these can be changed by TfNSW by notice published on its website.



Figure 2.2 Stations where the CBD increment leads to a different distance band

Source: TfNSW's Opal network area map as at January 2024 and IPART analysis. This map is for indicative purposes only and the relative locations of some stations and train lines have been adjusted for readability.

## Box 2.2 The CBD increment impacts select stations and customers

The following table presents an example of how the existing CBD increment affects customers travelling to or from select stations.

Customer	Departure Point	Destination Point	Track distance	Distance band	Adult peak fareª
А	Summer Hill	Central	7.05km	0-10km	\$4.20
В	Lewisham	Town Hall	9.47km (including CBD increment)	0-10km	\$4.20
С	Summer Hill	Town Hall	10.26km (including CBD increment)	10-20km	\$5.22

a. Fares are as of July 2024 and include GST.

In this example:

- Customer A is travelling from Summer Hill to Central, which is a CBD trip. The trip
  does not incur the CBD increment because Central is a gateway station. The rail
  (track) distance covered is 7.05km, which falls within the 0-10km distance band.
  Customer A pays the corresponding fare of \$4.20.
- Customer B is travelling from Lewisham to Town Hall, which is a CBD trip. The CBD increment is applied, so the total rail distance covered is determined as 9.47km. The trip falls within the O-10km distance band and Customer B pays the corresponding fare of \$4.20.
- Customer C is travelling from Summer Hill to Town Hall, which is a CBD trip. The
  CBD increment is applied, so the total rail distance covered is determined as
  10.26km. The addition of the 3.21km CBD increment causes the trip to move to
  the next distance band (i.e. 10-20km). Customer C pays the corresponding fare of
  \$5.22, i.e. \$1.02 more than the fares paid by customers A and B.

A list of train stations and trips where the CBD increment leads to a different distance band compared to when the distance is determined by the shortest distance by rail is presented in Appendix A and Figure 2.2.

Source: Transport for NSW, Open Data Opal Distance Tables and Opal Fare Values, accessed May 2024.

### Fares for on demand services

Our 2020 Determination also covers on demand bus services in Metropolitan and Outer Metropolitan Areas.<sup>k</sup> In 2020 we decided to set the maximum fares for on demand services at the same level as the maximum single fares for the relevant mode of transport.<sup>6</sup> We propose to retain this arrangement for the 2024 determination. As in the previous determination, premium and trial on demand services are excluded from the regulated fares.

k The Government previously offered an on demand ferry service. This service was made permanent.

Table 2.5 shows current fares for on demand bus services operating in Sydney and surrounding areas. These fares are consistent with current bus fares shown in Table 2.2.

Table 2.5 On demand bus services in Sydney and surrounding areas

Region	On demand service	Distance	Adult peak fares (incl. GST)
Sydney	Inner West	0-3km	\$3.20
		3-8km	\$4.36
		8+km	\$5.60
Sydney	The Ponds	O-3km	\$3.20
		3-8km	\$4.36
		8+km	\$5.60
Sydney	Northern Beaches	0-3km	\$3.20
		3-8km	\$4.36
		8+km	\$5.60
Newcastle	Lake Macquarie	0-3km	\$3.20
		3-8km	\$4.36
		8+km	\$5.60

Source: Transport for NSW, Adult fares, accessed July 2024 and Transport for NSW, On Demand public transport, accessed July 2024.

### 2.3.2 Schedule 2

Under Schedule 2 of the Determination TfNSW has flexibility to determine a different set of distance bands or more integrated mode pricing as long as the deemed average fare  $^{\text{I}}$  is lower than the maximum average fare. $^{\text{m}}$ 

The objective behind the inclusion of Schedule 2 in the 2020 Determination was to allow TfNSW flexibility to use distance bands other than the default distance bands set out in Schedule 1. This enables TfNSW to tailor its product and fare offerings to meet customer preferences or changes in operational requirements.

<sup>&</sup>lt;sup>1</sup> The deemed average fare is the weighted average of the fares determined by TfNSW, not using the default distance bands in Schedule 1. The weight distributions are set out in Table 5 of the 2020 Determination.

The maximum average fare is the weighted average of the maximum fares using the default distance bands in Schedule 1. The weight distributions are set out in Table 5 of the 2020 Determination.

## 3 What we heard from stakeholders

In January 2024 we released an Issues Paper setting out key issues and considerations for our review of maximum Opal fares until July 2028.

We sought feedback on the content and questions in our Issues Paper through submissions. We also consulted using the NSW Have Your Say website through a survey, a quick poll, and a 'share your ideas' tool where stakeholders could leave suggestions and 'upvote' suggestions from other stakeholders.

We heard from passengers and non-passengers of public transport, from organisations and other interested stakeholders.



This section sets out feedback we received from stakeholders on elements related to our determination. We also received feedback on other features related to the provision of Opal services, which we have addressed in Information Paper – What we heard and in our other draft report papers.

## 3.1 Stakeholders expressed diverse views on mode-based fares

One stakeholder submission expressed support for the current fare structure which is based on mode and distance travelled. They considered that the cost-of-service provision for the mode should be considered when determining fares. Applying different fares is a way of managing demand where different options are available, so that the people using the service can assess the value they obtain from each mode and their willingness to pay.<sup>7</sup>

Another stakeholder questioned whether differential fare levels based on mode will provide signals to passengers that assist in selecting suitable travel options in practice for a number of reasons, including that:

 Decisions on mode availability, frequency or the span of service are made by the NSW Government. These decisions are hard to reverse, regardless of changes in demand over time.

- Price signals provided by mode-based fares that apply across the entire Opal network may
  not align with the appropriate choice at the individual level because each transport
  corridor/location has unique features. The stakeholder considered this could lead to
  undesirable outcomes in individual situations or discourage the use of the most efficient form
  of public transport.
- Passengers do not necessarily have a choice between multiple modes. In most cases there is only one practical option available.
- Some external costs and benefits may be unknown, unmeasurable and unpredictable, which
  could distort the results of analysis on external costs and benefits generated by each
  transport mode.
- Mode-based fares may unnecessarily complicate the Opal fare structure, citing examples of cities such as Zurich, Munich, Singapore and Brisbane are based on zones, or distance, without any model differentiation.<sup>8</sup>

One Have your say respondent submitted that the current system is very complex, and a fare system that is the same for all modes of travel would be simpler and easier to understand.9

## 3.2 Stakeholders generally supported distance-based fares

Most stakeholders that provided feedback on distance-based fares agreed that that fares should increase with distance travelled. We also sought stakeholder feedback on the features of Opal fares and payments through our Have your say survey and around 32% of stakeholders that identified distance-based fare bands as an important feature to them.<sup>10</sup>

Some stakeholders expressed concerns about the fare levels for different distance bands, particularly that customers travelling short distances seem to be subsidising customers travelling longer distances. One stakeholder noted that an off-peak fare for a 3-hour train ride from Newcastle to Central is \$6.89, which is just 10 cents more than a 6-minute (one kilometre) ferry ride from Balmain East to Barangaroo, or Milsons Point to Circular Quay.<sup>11</sup> One Have your say respondent suggested reducing the fares for shorter distances.<sup>12</sup>

One Have your say respondent suggested that fares should be calculated more precisely based on the exact distance travelled. Two stakeholders noted that individuals in Newcastle travel further distances to access employment, education and service hubs compared to Sydney, which means that they are required to pay maximum bus fare (for the 8+km distance band) under the current fare structure for trips to access basic services.<sup>13</sup>

## 3.3 Stakeholders suggested that peak periods should be adjusted back to pre-COVID times

In July 2020 the NSW Government extended peak times by 3 hours per day (1.5 hours for each peak period) to help manage social distancing measures and encourage staggering of essential travel times during the COVID-19 pandemic.<sup>n</sup>

Peak times for Sydney Trains, Sydney Metro, light rail and bus services changed from 7-9am to 6:30-10am in the morning, and peak times for Intercity Trains services changed from 6-8am to 6-10am in the morning.

Some Have your say respondents suggested that the peak times should be adjusted back to pre-COVID times. One respondent considered that adjusting back to have off-peak start from 9am would encourage workers to opt in to start working a bit later. Another respondent noted that the initial change to peak times was aimed at preventing the spread of COVID, however they have never changed back. The respondent considered that the current peak hours are too broad and makes off-peak travel difficult.

We also sought feedback from stakeholders through our Have your say survey on peak and off-peak travel. Only 14% of respondents told us that they are likely to change some of their travel to off-peak times over the next few years, with the main drivers for this being the 30% off-peak discount and less crowding in the off-peak. 71% of respondents told us that they are not likely to change their travel to off-peak times, mainly due to a lack of flexibility to change travel times (at all) or to change travel times to off-peak times. The remaining 15% of respondents reported that they already travel during off-peak times.<sup>14</sup>

One stakeholder provided feedback on the off-peak discount. They considered that a discount in the range of 30-50% could be enticing enough to motivate customers to shift their travel times from peak to off-peak. However, the stakeholder noted that factors such as commuter preferences, the reliability and frequency of off-peak services and the flexibility of commuters' schedules also impact customers' decisions to switch from peak to off-peak.<sup>15</sup>

One stakeholder considered that peak fares should only be applied to services travelling in the direction of busy locations.<sup>16</sup>

## 3.4 Other stakeholder feedback related to the form of determination

## Two stakeholders suggested introducing location-based fares

Two stakeholders considered that Newcastle should be treated differently to Sydney to reflect differences in the level of services, access to jobs, education and services, average salaries, availability of paid parking and spare capacity.<sup>17</sup>

#### One stakeholder asked for the removal of the CBD increment

One stakeholder requested the removal of the CBD increment of 3.21km which is automatically added when a customer travels to or from the CBD. $^{18}$ 

## One stakeholder suggested a CBD fare free zone

One Have your say respondent suggested introducing a fare-free zone in the CBD similar to Melbourne.<sup>19</sup>

Peak times for Sydney Trains, Intercity Trains, Sydney Metro, light rail and bus services changed from 4-6:30pm to 3-7pm in the evening.

## 4 Our draft decisions on the form of determination

This section discusses our draft decisions on the form of determination.

We have made a draft decision to determine appropriate maximum fares for Opal services in such a way that the maximum fares are either:

- The maximum fares set in Part 2 of the Draft Determination for the default distance bands in Table 1.2 to Table 1.5; or
- The maximum fares determined by TfNSW consistent with Part 3 of the Draft Determination for alternative distance bands provided that the deemed average fare does not exceed the maximum average fare of \$4.76 (ex GST in \$2024-25).

Part 3 of our Draft Determination describes our draft methodology to set appropriate maximum fares for the period from 1 December 2024 to 30 June 2028. We consider that our methodology provides TfNSW with sufficient flexibility to tailor product and fare offerings to meet customer preferences, and account for the introduction of new services, and manage uncertainty in the post COVID-19 environment.

Part 2 of our Draft Determination sets out the fares when the methodology outlined in Part 3 is applied using the default distance bands. The maximum fares presented in Table 1.2 to Table 1.5 apply by default unless TfNSW chooses to uses distance bands other than the default distance bands. Box 4.1 shows that the deemed average fare that would result from the use of the maximum fares in Table 1.2 to Table 1.5 is equal to the maximum average fare of \$4.76.

## Box 4.1 Part 2 is an application of the methodology in Part 3

This box demonstrates the deemed average fare calculation using the maximum fares set out in Part 2 of the Draft Determination.

#### Train services

Distance of the trip (km)	Maximum fare 2024-2028 (ex GST, \$2024-25)	Distribution	Product
0 to ≤ 10	\$4.17	19.86%	\$0.83
> 10 to ≤ 20	\$5.30	15.08%	\$0.80
> 20 to ≤ 35	\$6.09	11.30%	\$0.69
> 35 to ≤ 65	\$8.13	4.60%	\$0.37
> 65	\$10.45	1.37%	\$0.14
Total	-	52.20%	\$2.83

Source: TfNSW, Information request – Annexure B, March 2024 and IPART analysis.

## Light rail services

Distance of the trip (km)	Maximum fare 2024-2028 (ex GST, \$2024-25)	Distribution	Product
0 to ≤ 3	\$3.02	4.18%	\$0.13
> 3 to ≤ 8	\$4.40	2.11%	\$0.09
> 8 to ≤ 20	\$5.65	0.00%	\$0.00
>20	\$6.03	0.00%	\$0.00
Total	-	6.29%	\$0.22

Source: TfNSW, Information request - Annexure B, March 2024 and IPART analysis.

## Ferry services

Distance of the trip (km)	Maximum fare 2024-2028 (ex GST, \$2024-25)	Distribution	Product
0 to ≤ 9	\$7.19	1.49%	\$0.11
> 9	\$9.00	1.03%	\$0.09
Newcastle ferry	\$3.23	0.08%	\$0.00
Total	-	2.60%	\$0.20

Source: TfNSW, Information request – Annexure B, March 2024 and IPART analysis.

#### Bus services

Distance of the trip (km)	Maximum fare 2024-2028 (ex GST, \$2024-25)	Distribution	Product
0 to ≤ 3	\$3.02	19.44%	\$0.59
> 3 to ≤ 8	\$4.40	14.39%	\$0.63
> 8 to ≤ 20	\$5.65	4.12%	\$0.23
>20	\$6.03	0.96%	\$0.06
Total	-	38.91%	\$1.51

Source: TfNSW, Information request – Annexure B, March 2024 and IPART analysis.

The deemed average fare under Part 2 of the Draft Determination is equal to \$2.83 + \$0.22 + \$0.20 + \$1.51 = \$4.76 which is consistent with the methodology described in Part 3 of our Draft Determination.

We consider that our Draft Determination supports the delivery of our fare setting objectives, particularly that fare structures are simple and flexible, and fares support better travel options.

## 4.1 Part 2 of our Draft Determination sets fares based on mode and distance travelled

## 4.1.1 We propose to maintain mode-based maximum fares

We propose to maintain mode-based maximum fares. This is because our analysis shows that the efficient costs of delivering services, and the external costs and benefits, vary by mode.

We received feedback from some stakeholders that differential fare levels based on mode play a limited role in assisting passengers to select suitable travel options and unnecessarily complicate the Opal fare structure.

We acknowledge that setting fares at the same level for all modes of transport would improve simplicity. In our 2020 review of Opal fares we set maximum fares for each mode of transport but recommended that light rail, train and bus services should have an integrated fare structure as the Opal network becomes more integrated. This would also remove any penalties on customers for switching between modes to make a single journey.

The maximum fares presented in our Draft Report are based on findings from our fare options analysis, which involved considering a range of possible fare options that account for capacity and willingness to pay and likely impact on public transport usage, as well as the outcomes of socially optimal fares modelling. This modelling found that the per journey and per kilometre marginal costs and associated external costs and benefits can vary substantially between modes. We consider it is appropriate to reflect these differences in the maximum fares that we set. For more information on the socially optimal fares analysis, see Technical Paper – Modelling socially optimal fares.

As discussed in section 2.2, our determination sets the maximum fares for Opal services, and it is the responsibility of TfNSW to set the actual fares for Opal services (as long as they are below the maximum fares). If TfNSW decides to maintain mode-based fares, this could provide price signals to customers to assist them to choose between modes, where it is practical for them to do so. However, the Draft Determination does not prevent TfNSW from adopting a more integrated fare structure or setting fares at the same level for all modes for simplicity, or any other reason. We note that fares for light rail and bus services are currently set at the same level, and travel on Sydney Metro, Sydney Trains, and/or NSW TrainLink Intercity services is currently treated as one mode, meaning a single trip could include travel across all 3 modes.

We have also made a draft recommendation that TfNSW consider linking Opal discounts (such as the transfer discount) to other fares as part of an overall fare package so that the value of these discounts do not diminish over time because of inflation, and customers are not penalised when they need to switch between modes to make a single journey. For more information on this, see Information Paper – Affordability and Information Paper – Fare package options.

<sup>°</sup> We recommended that ferry fares should remain higher than other fares.

## 4.1.2 We propose to maintain distance-based fares

We consider that customers who take longer journeys should pay more than those who take shorter journeys to reflect the additional costs incurred. This is consistent with our socially optimal fares analysis which shows that fares for all modes should increase with distance travelled. For more information, see our technical paper on Modelling socially optimal fares.

One stakeholder suggested that fares should be calculated more precisely based on the exact distance travelled. While we consider that this would improve the cost-reflectivity of fares (to an extent, as fares only recover a small portion of the costs of service provision), this would also increase the complexity of the fare structure.

We note that Part 3 of our Draft Determination allows TfNSW to implement a fare structure with more distance bands. However, we understand that the existing Opal ticketing system allows for a total of 250 distance/fare bands across modes, and many of these are needed for concession and other administrative fares. This places a limit on the number of distance/fare bands that can be implemented while the existing Opal ticketing system is in place.

## 4.1.3 We made draft decisions to remove the CBD increment and define the distance of a train trip as the shortest distance by rail

The CBD increment is a historical legacy of the paper ticket system, which allowed customers with a 'city' destination to exit at any city station and return from any other. This functionality is no longer necessary with the introduction of the Opal smartcard reader, which determines the exact station of entry and exit. We have previously recommended that the CBD increment be removed as part of our 2016 review of Public Transport Fares in Sydney and Surrounds.<sup>20</sup>

We consider that our draft decisions to remove the CBD increment and define the distance of any trip by train as the shortest distance by rail support a simple fare structure and improve fairness by ensuring that all customers are changed on the same basis, that is, using the shortest distance by rail. We note that the distance for most train trips is already determined by shortest track distance between stations, though some exceptions apply.

We intend for the removal of the CBD increment to be revenue neutral, so that any loss of revenue from the removal of the CBD increment is recovered through a slightly higher fare for all train trips. We modelled the impact of this draft decision and found that it could lead to a loss of up to \$8.6 million each year in revenue. If this is spread across all train trips, this would lead to an increase of around 3 cents to the maximum fare per train trip. We note that our modelling does not account for any changes to the shortest distance by rail between stations and the introduction of new stations with the opening of the new metro line between Chatswood and Sydenham. We consider that these changes could impact our estimates, and we intend to work with TfNSW to better understand and model the impacts of these changes before the release of our Final Report in October 2024.

P Based on Opal trips taken in 2023.

We are seeking feedback from stakeholders on whether it is appropriate to remove the CBD increment and recover the foregone revenue from all train trips across the Opal network. We are also interested in information on any costs specific to select stations (e.g. busy locations or CBD stations) that should be reflected in the fare structure, possibly in the form of an additional charge (also see section 4.1.7).

## 4.1.4 Maximum fares would also apply to on demand services

We have made a draft decision to set the maximum fares for on demand services at the same level as the maximum single fares for the relevant mode of transport. This is consistent with the approach taken in our 2020 Determination.

While customers of on demand services receive a more tailored service compared to other Opal services, we understand that the on demand services now operate as part of the standard bus contracts. This places limitations on the ability to determine costs specific to on demand services and use this information to set separate maximum fares. As a result, we consider it is appropriate to set maximum fares for on demand services in line with the maximum single fares for the relevant mode of transport, particularly as trips taken using on demand services currently account for only a small percentage of total trips taken on Opal services. This also supports our fare setting objective to maintain a simple fare structure.

We did not receive any feedback from stakeholders on fares for on demand services through consultation on our Issues Paper.

### 4.1.5 Maximum fares would increase by inflation each year

Under our Draft Determination, the maximum fares would remain constant in real terms over the period from 1 December 2024 to 30 June 2028. This allows TfNSW flexibility to set its own price path over the determination period. This means that TfNSW can choose to increase fares to the maximum through a one-off increase or spread the increase over multiple years of the determination period. We are seeking stakeholder views on whether they support allowing TfNSW to set its own price path, or if IPART should set the price path instead (for example, specifying the allowable real increases in each year of the determination) or apply additional constraints to individual fares.

We have also made a draft decision that maximum fares in the Draft Determination are inflated by the change in the All groups CPI for Sydney each year over the determination period. This approach differs from the approach taken in our 2020 Determination where our maximum fares included an assumed level of change in inflation over the determination period. We consider that it is more appropriate to allow maximum fares to change with actual inflation for the upcoming determination period, given the volatility of inflation in recent years. We are seeking feedback from stakeholders on whether estimated future CPI should be included in fares or allowed to be included based on actual inflation experienced.

Maximum fares would continue to be inflated by the change in the All groups CPI for Sydney each year after the end of the determination period until the Final Determination is updated or replaced.

## 4.1.6 We do not propose to introduce new location-based fares

Two stakeholders considered that Newcastle should be treated differently to Sydney.

We acknowledge that there are differences between Newcastle and Sydney, however, splitting up the Opal network would increase the complexity of the fare structure. We have also received feedback from other stakeholders about regions not currently on the Opal network requesting integration and one fare structure across the state.

We have not undertaken modelling of socially optimal fares separately for Newcastle, though we expect that the socially optimal fares could potentially be higher for Newcastle compared to Sydney due to reduced economies of scale and lower external benefits from avoided road congestion.

Further, we consider that concerns relating to service performance of public transport in Newcastle should be addressed through other means, rather than through a reduction in fares. For example, increased availability of on demand bus services would allow for greater flexibility in when customers choose to travel, the pick-up/drop-off locations, and could reduce the need for some regular bus services currently running with spare capacity.

The Newcastle ferry service (Newcastle-Stockton) is the only service that has its own fare under the Draft Determination (see Table 1.5). In Information Paper – Fare package options we discuss this issue further and seek comment on whether the Newcastle ferry should be integrated with Sydney ferries into a single ferry mode, and if so, where the shortest distance band should be set.

#### Fare-free zone in the CBD

One stakeholder suggested introducing a fare-free zone in the CBD similar to Melbourne.

On balance, we do not consider that introducing a fare-free zone in the CBD supports our fare setting objectives. In our view, the main benefits of a fare-free zone are that it improves simplicity, supports better travel options by reducing road congestion and supports affordability.

On the other hand, introducing a fare-free zone in CBD could encourage people that would have engaged in active transport (for example, walking or cycling) to use public transport, which may not be the desired outcome. It could also lead to crowding on services, require the introduction of additional services without generating any additional revenue to contribute to the costs of additional services, and erode the share of the costs of running public transport services that is covered by passengers.

We note that Melbourne's Free Tram Zone is primarily aimed at helping tourists move around the city centre rather than being driven by public transport policy, which is a decision for the Government.<sup>21</sup> Our Draft Determination sets the maximum fares from 1 December 2024 and the NSW Government has discretion to implement fare free travel where it determines is appropriate. For example, the Parramatta shuttle bus is a free transport solution run by TfNSW through Transdev that connects the ferry wharf with the commercial, retail and recreational landmarks of Parramatta city.<sup>22</sup>

## 4.1.7 We do not propose to introduce direction-based fares

One stakeholder considered that peak fares should only be applied to services travelling in the direction of busy locations.

We consider there are several factors that could justify setting a higher fare for services travelling to busy locations. These are discussed below.

## To reflect additional costs associated with busy locations

We consider that higher fares or an additional charge may be appropriate if busy locations such as CBD stations impose additional costs on the providers of public transport. These could include costs associated with managing congestion in the morning and evening peak times, or costs associated with maintaining complex underground parts of the train network.

As discussed in section 4.1.3, we are seeking feedback from stakeholders on whether there are any costs specific to busy locations that should be captured through a higher fare, or additional charge, that is applied exclusively to services travelling in the direction of these locations.

## To reduce congestion at busy locations

We understand that the opening of the Chatswood to Sydenham section of the City and Southwest Metro is expected to reduce existing pressure on the city circle. This, together with the conversion of the T3 Bankstown Line to metro standards and signalling and infrastructure upgrades across the existing network, will increase the capacity of train services across Sydney from 120 services per hour to 200 services per hour.<sup>23</sup>

There are also new light rail services expected in the short to medium term. Stage 1 of the Parramatta light rail is expected to open from mid-2024, and design and early works for Stage 2 of the Parramatta light rail is expected to commence in 2024 with major construction to start in 2025.<sup>24</sup>

Additionally, Information Paper – Patronage found that there is more capacity on train services in 2023 compared to 2019 due to reduced patronage and working from home arrangements. This coupled with the introduction of new services could mean that congestion at busy locations may not be a significant problem in the short to medium term.

## To reflect greater capacity to pay

We examined data on train station exits in the morning and evening peaks to identify some examples of busy locations, and to understand the capacity to pay of individuals travelling to these locations.

Figure 4.1 shows exits on a typical day in 2023 for the top 20 train stations with the greatest number of tap-offs between 6-10am and compares these against exits observed on a typical day in 2019. The figure also shows the average number of exits across all train stations on the network over this period.

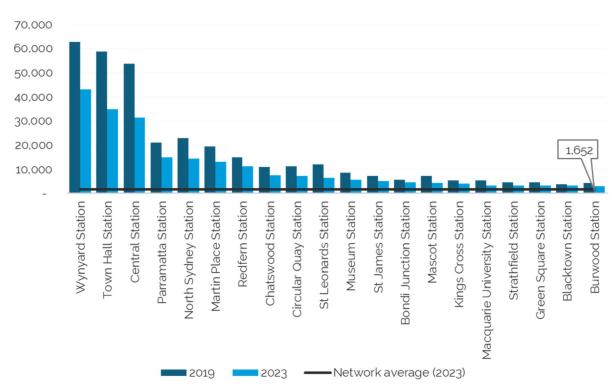


Figure 4.1 Train station exits for the top 20 stations with the most tap-offs (6-10am)

Source: Transport for NSW, Train Station Entries and Exits Data, accessed April 2024.

Assuming that train station exits in the morning peak generally align with an individual's place of work, we referred to 2021 census data on Local Government Area (LGA) (Place of Work) and total personal income. We found that North Sydney reported the highest percentage share (17.2%) of individuals in the highest personal income bracket<sup>q</sup>, followed by the City of Sydney (16.7%). Over 83% of individuals that identified North Sydney and the City of Sydney as their place of work reported total personal income above the median for the Sydney Greater Capital City Statistical Area (GCCSA). This suggests that individuals that identify these LGAs as their place of work generally receive a higher income and may have greater capacity to pay.

However, we note that more flexible working arrangements post-COVID have reduced the need for some occupations that record a higher level of pay (on average) such as professionals and managers to travel, compared to other occupations that record a lower level of pay (on average) such as sales workers and community workers. Based on this, there is insufficient information to conclude that individuals that travel to busy locations in the morning peak have greater capacity to pay.

<sup>&</sup>lt;sup>q</sup> \$3,500 or more per week, \$182,000 or more per year.

Based on 2021 census data on occupation and total personal income, filtered for the Sydney GCCSA and the March 2024 Transport Opinion Survey which found that professionals and managers spent a greater share of their working time working from home (26% and 23% respectively) compared to sales workers and community workers (19% and 18% respectively).

Figure 4.2 shows exits on a 'typical day' in 2023 for the top 20 train stations with the greatest number of tap-offs between 3-7pm and compares these against exits observed in a typical day in 2019. The figure also shows the average number of exits across all train stations on the network over this period.

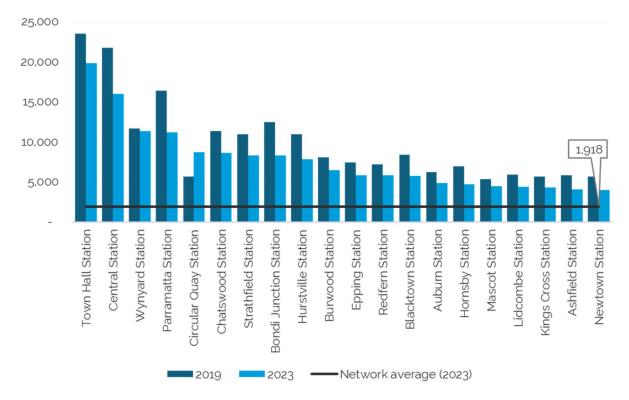


Figure 4.2 Train station exits for the top 20 stations with the most tap-offs (3-7pm)

Source: Transport for NSW, Train Station Entries and Exits Data, accessed April 2024.

Assuming that train station exits in the evening peak generally align with an individual's place of usual residence, we then referred to 2021 census data on LGA (Usual Residence) and total personal income. We examined the data for LGAs corresponding to the top 20 stations with the most tap-offs and found that some LGAs such as Burwood, Cumberland and Georges River recorded a median personal income within the \$650-\$799 per week (\$33,800-\$41,599 per year) bracket, whereas Waverley recorded a substantially higher median personal income within the \$1,250-\$1,499 per week (\$65,000-\$77,999 per year) bracket. As a result, we do not consider there is sufficient evidence to suggest that individuals that travel to busy locations in the evening peak necessarily have greater capacity to pay.

<sup>&</sup>lt;sup>5</sup> Tap-offs at some train stations may not be indicative of an individual's place of usual residence but a destination for after-work activities such as dinner, entertainment and shopping.

t Presented in \$2021-22.

Our analysis focuses on train trips, but we consider similar findings are likely to apply for trips taken on other public transport modes. We note that we have made assumptions about the characteristics of individuals travelling to busy locations using the locations of the train stations identified in Figure 4.1 and Figure 4.2. This is in absence of more detailed information, which would require a more detailed survey or study of travel patterns, purpose and usage by different demographics. We also note that while income is considered a key measure of capacity to pay, an individual's capacity to pay can also be impacted by other factors.

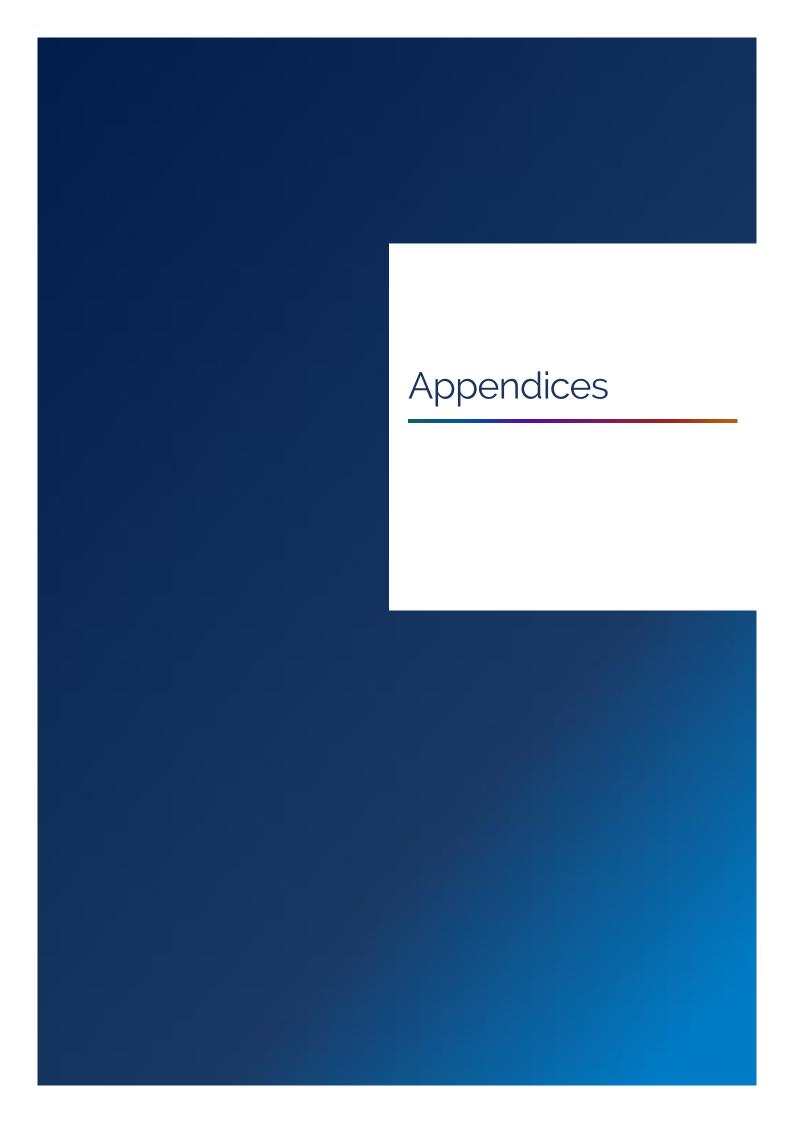
Further, we consider that introduction of direction-based fares would increase the complexity of the fare structure and may not be possible under the existing card-based ticketing system. This could be possible under a next generation account-based ticketing system, however, this is unlikely to be implemented within the 2024-2028 determination period. Identifying busy sections of trips and identifying the path travelled where there is more than one option for travel could also present challenges for this type of fare system. For these reasons we are not determining or recommending direction-based fares.

## 4.2 Part 3 of our Draft Determination provides flexibility

Part 3 of our Draft Determination describes our draft methodology to fix maximum fares for Opal service from 1 December 2024. The methodology is designed to provide TfNSW with flexibility to introduce an integrated fare structure for all modes or use distance bands other than the default distance bands set out in Part 2.

Under Part 3 of our Draft Determination, TfNSW would have flexibility to determine its own fares and distance bands. This enables TfNSW to raise some fares if it lowers other fares, as long as the deemed average fare is lower than the maximum average fare. We acknowledge that this may create uncertainty for customers, and we are seeking feedback from stakeholders on whether there should be any constraints on the allowable real increase TfNSW could apply in a single year or to any individual fare.

We consider that the flexibility offered by Part 3 is particularly important given upcoming changes to Opal services, including the introduction of new metro and light rail services and the Opal Next Gen upgrade, which could lead to the introduction of new fare options and products.



## A Fare band impacts of the CBD increment

Currently, for train travel in or out of the Sydney CBD via a city station, the trip distance is measured as the distance from the tap-on station to a gateway station (Central, Wynyard or Kings Cross depending on the line) plus a CBD increment of 3.21 km.

Table A.1 presents the train stations and trips where the CBD increment leads to a different distance band compared to our draft decision to define the distance of a train trip as the shortest distance by rail between the departure station and the destination station. The train stations are listed in alphabetical order, and trips to/from a city station that incur a higher fare because of the CBD increment are shown with a red tick. The train stations and fare band impacts are also shown in Figure 2.2 of this information paper.

Table A.1 Trips currently incurring a higher fare due to the CBD increment

				City st	ations			
Station	Centrala	Town Hall	Wynyardb	Circular Quay	St James	Museum	Martin Place	Kings Cross <sup>c</sup>
Arncliffe		$\checkmark$			$\checkmark$	$\checkmark$		
Artarmon		$\checkmark$		$\checkmark$			$\checkmark$	
Ashfield		$\checkmark$			$\checkmark$	$\checkmark$		
Auburn		$\checkmark$				$\checkmark$		
Bankstown		$\checkmark$				✓		
Berala		$\checkmark$			$\checkmark$	$\checkmark$		
Berowra		$\checkmark$						
Dulwich Hill		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	
Glenfield		$\checkmark$			$\checkmark$	$\checkmark$		
Heathcote		$\checkmark$			$\checkmark$	$\checkmark$		
Hills Showground	See note.	$\checkmark$		✓				
Hurlstone Park		$\checkmark$				$\checkmark$		
International		$\checkmark$			$\checkmark$	$\checkmark$		
Lapstone		$\checkmark$			$\checkmark$	$\checkmark$		
Liverpool		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Macquarie Park	✓	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	

				City st	ations			
Station	Centrala	Town Hall	Wynyard <sup>b</sup>	Circular Quay	St James	Museum	Martin Place	Kings Cross <sup>c</sup>
Macquarie University		$\checkmark$		$\checkmark$				
Meadowbank		$\checkmark$			$\checkmark$	$\checkmark$		
Mortdale		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Oatley		$\checkmark$			$\checkmark$	$\checkmark$		
Olympic Park								See note.
Pymble	✓	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Riverwood		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	
Scarborough		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	
Seven Hills		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Summer Hill		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Tempe		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Turramurra		$\checkmark$		$\checkmark$				
Turrella		$\checkmark$			$\checkmark$	$\checkmark$		
West Ryde						$\checkmark$		
Wolli Creek		$\checkmark$	✓		$\checkmark$	✓	✓	
Woolooware		$\checkmark$			$\checkmark$	$\checkmark$		
Woy Woy	✓	✓		✓	✓	✓	$\checkmark$	$\checkmark$

a. Gateway station.

Note: Our analysis indicates that the following trips would move from a lower distance band to a higher distance band as a result of removing the CBD increment and using the actual distances between city stations: Olympic Park to/from Kings Cross and Hills Showground to/from Central.

b. Gateway station.

c. Gateway station.

## B Our approach to removing the CBD increment

This appendix describes the approach we took to adjust TfNSW's current rail distance table to remove the CBD increment and apply the shortest distance by rail between city stations.

We used this to estimate the impact of our draft decision to remove the CBD increment on fare revenue and to produce the distribution table (Table 3.2) in our Draft Determination.

The steps are described below.

- 1. Using the rail distance table published by TfNSW (A),<sup>25</sup> we identified the gateway station for each trip on the Opal network to/from a city station.
- 2. We removed 3.21km from the rail distance for each trip on the Opal network to/from a city station, except for where the trip starts or ends at a gateway station.
- 3. We added the shortest distance by rail between city stations to the distance for each trip on the Opal network to/from a city station, except for where the trip starts or ends at a gateway station. To do this, we used the distances shown in Table B.1. This allowed us to produce a new version of the rail distance table that excludes the CBD increment and includes the shortest distance by rail between city stations (B).

Table B.1 Shortest distance by rail between city stations (km)

	Central	Town Hall	Wynyard	Circular Quay	St James	Museum	Martin Place	Kings Cross
Central	-							
Town Hall	1.10	-						
Wynyard	1.90	0.80	-					
Circular Quay	2.76	1.80	1.00	-				
St James	1.36	2.46	2.40	1.40	-			
Museum	0.76	1.86	2.66	2.00	0.60	-		
Martin Place	2.00	0.90	1.70	2.70	3.36	2.76	-	
Kings Cross	3.30	2.20	3.00	4.00	4.66	4.06	1.30	-

Note: The figures presented in this table are subject to refinement, as the actual track measurement can be different using different methodologies (e.g. measuring from the start of the platform versus measuring from the end of the platform).

Source: Rail Infrastructure Corporation, Metropolitan Network Diagram July 2001 Update and IPART analysis.

- 4. We estimated fare revenue using the 2 rail distance tables (A & B) and information on train trips in 2023 provided by TfNSW. This involved:
  - a. finding the distance by rail between any pair of train stations on the Opal network using  ${\bf A}$  and  ${\bf B}$

- b. allocating the trip into the corresponding distance band and applying the corresponding fare based on the distance band<sup>a</sup>
- c. multiplying the number of train trips between each pair of train stations on the Opal network in 2023 by the appropriate fares to calculate revenue.
- 5. We compared fare revenue generated using **A** and **B** and calculated the difference between these (**\$8.6 million**). This represents the estimated loss in revenue from train trips as a result of our draft decision to remove the CBD increment. As we did not adjust for concession fares and other discounts, we consider that \$8.6 million represents the maximum possible loss in revenue, and the actual loss in revenue would be lower than this amount.
- 6. We divided the \$8.6 million by the total number of train trips in 2023 (based on TfNSW data) and found that this could be recovered through an increase of around 3 cents to the maximum fare per train trip.
- 7. We also used the information on train trips in 2023 and **B** to produce the distribution table (Table 3.2) in our Draft Determination. This involved:
  - a. finding the shortest distance by rail between each pair of train stations on the Opal network using  ${\bf B}$
  - b. allocating the number of train trips between each pair of train stations on the Opal network in 2023 into appropriate 1km distance bands
  - c. combining this with data on trips by 1km distance bands for the other modes (i.e. bus, ferry and light rail) for 2023 to produce the distribution table by mode and 1km distance band.

We used Adult fares and assumed that 51% of trips occur in the peak, and 49% of trips occur in the off-peak. We did not adjust for concession fares and any other discounts (e.g. daily and weekly caps).
 The assumption around peak/off-peak rail travel is based on TfNSW data for rail trips (i.e. Sydney trains, Intercity trains and Sydney Metro) for 2023.

# C Changes between the 2020 Determination and our Draft Determination for 2024-2028

Table C.1 Comparison of the 2020 Determination and the Draft Determination

Description	2020 Determination	Our Draft Determination
Change to exclusions from the determination for on demand services provided on a trial basis	The 2020 Determination does not apply to:  • premium on demand services  • on demand services provided on a trial basis.	The Draft Determination does not apply to:  • premium on demand services  • on demand services provided on a trial basis during a trial period of up to 2 years.
New clauses added to the legislative background to provide context on how Opal fares are determined		TfNSW may not determine a fare that exceeds any maximum fare determined by IPART or in accordance with a methodology determined by IPART     The Minister may approve a scheme for Government subsidised travel on public transport services. TfNSW must give effect to a scheme for Government subsidised travel.
Regulated fares charged using the default distance bands	Maximum fares are constant in <b>nominal</b> terms through the determination period (i.e. fares do not change by inflation each year).	Maximum fares are constant in <b>real</b> terms through the determination period (i.e. fares change by inflation each year).
New clauses added for appropriate maximum fares for service replacement buses		The appropriate maximum fare provided by a service replacement bus is the maximum fare that would apply if the service was provided by the usual mode.      The distance of the trip is the distance that would have applied had the Opal service been provided by the usual mode.
Maximum average fares in the determination	The 2020 Determination describes how the maximum average fares are to be calculated.	The Draft Determination sets out the maximum average fares in Table 3.1. We can make the determination clearer in this regard because we are proposing to remove scope for TfNSW to update the distribution table using slightly updated patronage data.
Maps of bus service contracts updated	<ul> <li>Map of Sydney         Metropolitan Bus Service</li></ul>	<ul> <li>Map of Sydney         Metropolitan Bus Service         Contracts (the latest         available version at time of         release).</li> </ul>

Description	2020 Determination	Our Draft Determination
	Map of Outer Sydney     Metropolitan Bus Service     Contracts current as at July 2017.	<ul> <li>Map of Outer Sydney         Metropolitan Bus Service         Contracts (the latest         available version at time of         release).</li> </ul>
Rounding rules added for the CPI Multipliers		<ul> <li>CPI Multipliers are to be rounded to 3 decimal places before adjusting a maximum price for inflation</li> <li>Any amount that is a multiple of 0.0005 (but not a multiple of 0.001) is to be rounded up to 3 decimal places.</li> </ul>
Change in the definition of CPI	The consumer price index All Groups index number for <b>the weighted average of eight capital cities</b> as published by the Australian Bureau of Statistics.	The consumer price index All Groups index number for <b>Sydney</b> as published by the Australian Bureau of Statistics.
Definition of CBD increment removed as a result of our draft decision to remove the CBD increment	CBD increment defined as an additional distance specified by TfNSW by notice published on its website.	-
Definition of CBD trip removed as a result of our draft decision to remove the CBD increment	CBD trip defined as a trip which:  starts at a station which is not a city station and ends at a city station other than a gateway station; or  starts at a city station other than a gateway station and ends at a station which is not a city station.	-
Definition of city station removed as a result of our draft decision to remove the CBD increment	City station defined as the train stations of Central, Town Hall, Wynyard, Circular Quay, St James, Museum, Kings Cross, Martin Place or any other station specified by TfNSW by notice published on its website.	-
Definition of the CPI Multiplier added as a result of our draft decision to set maximum fares constant in real terms through the 2024-2028 determination period	-	The CPI Multiplier calculation is presented in Box 6.1 of the Draft Determination.
Change to the definition of the distance of the trip for any trip using a train (excluding light rail) as a result of our draft decision to remove the CBD increment	the distance by rail between the Departure Point and the Destination Point; and     if the trip is a CBD trip, the CBD increment.	Defined as the <b>shortest</b> distance by rail between the Departure Point and the Destination Point.
Definition of gateway station removed as a result of our draft decision to remove the CBD increment	the train stations of Central, Kings Cross or Wynyard, but only in respect of a trip where that is the first city station where the customer does any of the following:     passes through the station     boards at the station, or	

Description	2020 Determination	Our Draft Determination
	<ul> <li>disembarks at the station, or</li> <li>any station specified by TfNSW by notice published on its website.</li> </ul>	
Ferry services operating between Manly and Circular Quay added to the definition of Opal services to reflect the Opal services included in the referral	Opal services include Ferry Services operated by Sydney Ferries under the authority of a Passenger Service Contract with TfNSW.	Opal services include Sydney Ferries network services operating under the authority of a Passenger Service Contract with TfNSW; and Ferry Services operating between Manly and Circular Quay under the authority of a Passenger Service Contract with TfNSW.
Change to the definition of regulated fare	Defined as a payment using an Opal card or any approved payment device for a single trip.	Defined as a payment using an Opal card or any approved payment device for a single trip <b>on an Opal service</b> .
Definition of revised distribution table removed as the Draft Determination fixes the distribution table	Revised distribution table defined as a table published on TfNSW's website which replaces the distribution table.	-

Note: The purpose of this table is to summarise the main changes between IPART's 2020 Determination of Maximum fares for Opal services and our Draft Determination and does not necessarily capture all changes.

Please refer to our Draft Determination for how we propose maximum fares would apply for 2024-2028.

Sydney Metro, Sydenham to Bankstown, accessed June 2024.

Transport for NSW, OpalPay, accessed April 2024.

Modaro, E, Community-loved Glebe ferry to remain in Sydney waters after months of uncertainty, December 2022.

Transport for NSW, Opal single tickets, accessed April 2024.

Transport for NSW, Getting to and from Sydney Airport | transportnsw.info, accessed April 2024. IPART, Maximum Opal Fares 2020-2024 – Final Report, February 2020, p 9.

BusNSW, submission to IPART Issues Paper, March 2024, pp 4 & 7.

Sandell, R, submission to IPART Issues Paper, February 2024, pp 1-2.

Contributor, NSW Government Have your say website - Setting maximum Opal fares until 2028, accessed April 2024.

Social Pinpoint, Have Your Say - Form results summary, March 2024, p 16.

Sandell, R, submission to IPART Issues Paper, February 2024, p 2.

Contributor, NSW Government Have your say website - Setting maximum Opal fares until 2028, accessed April 2024.

Anonymous (W24/535), submission to IPART Issues Paper, March 2024, p1 and City of Newcastle, submission to IPART Issues Paper, March 2024. p 2.

Social Pinpoint, Have Your Say – Form results summary, March 2024, pp 13-15.

BusNSW, submission to IPART Issues Paper, March 2024, pp 5-6.

IPART, Have Your Say - Free-form survey responses, March 2024.

Anonymous (W24/535), submission to IPART Issues Paper, March 2024, pp 1-2 and City of Newcastle, submission to IPART Issues Paper, March 2024, pp 1-2.

Anonymous (W24/532), submission to IPART Issues Paper, February 2024, p 1.

Contributor, NSW Government Have your say website - Setting maximum Opal fares until 2028, accessed April 2024.

IPART, More efficient, more integrated Opal fares - Final Report, May 2016, p 13.

Philp, N, The free tram zone is a gimmick that needs to go, June 2019.

City of Parramatta, Free shuttle bus, accessed April 2024.

Sydney Metro, Sydenham to Bankstown, accessed June 2024.

NSW Government, Parramatta Light Rail Stage 2, accessed June 2024.

Transport for NSW, Open Data Opal Distance Tables and Opal Fare Values, accessed April 2024.