



QA of Transport for NSW pricing proposal for compliance with IPART Determination

THE INDEPENDENT PRICING AND REGULATORY TRIBUNAL OF
NSW (IPART)

July 2016

QA of Transport for NSW pricing proposal for compliance with IPART Determination

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Executive summary

The Independent Pricing and Regulatory Tribunal of NSW (IPART) determines the maximum fares to apply from July 2016 to June 2019 for all Opal Sydney services in Sydney and surrounds (covering rail, light rail, buses and ferries).¹ IPART's Determination *Transport – maximum fares for Opal services* (the Determination) was issued in the form of a maximum weighted average price change such that the increase in the Average Adult Fare in 2016-17 is limited to 6.6% including inflation.

Frontier Economics was engaged by IPART to undertake a Quality Assurance (QA) check of Transport for NSW (TfNSW) pricing proposal—which included an increase in average Adult fares for Opal services of 3.0% in 2016-17—and to provide assurances to IPART that the data and calculations used to calculate Average Adult Fares for 2015-16 and 2016-17 comply with IPART's Determination. A summary of key our key findings is set out in Box 1.

Box 1: Frontier Economics' key findings in QA of TfNSW Pricing Proposal for compliance with IPART Determination

Frontier Economics was engaged by IPART to undertake a QA check of TfNSW's pricing proposal and to provide assurances to IPART that the data and calculations used to calculate Average Adult Fares for 2015-16 and 2016-17 comply with IPART's Determination.

We have reviewed the logic, calculations and assumptions underlying the pricing proposal and are satisfied that the Average Adult Fare for 2015-16 and 2016-17 in the TfNSW Pricing Proposal have been calculated appropriately in that:

- Assumptions used in the calculation of the Trip Distribution can either be traced to source data or information reflecting the number of trips on Opal Services made for the 2015-16 period (or representative 2015-16 period) under an Opal Card and under a Ticket and/or these assumptions are documented and reasonable in the circumstances
- These assumptions are correctly used to calculate weights in the Trip Distribution and this calculation can be replicated
- The Average Adult Fare is correctly calculated using this Trip Distribution and that this calculation can be replicated

On this basis we can provide assurance that the proposed increase in the Average Adult Opal fare does not exceed 6.6% including inflation and that the TfNSW Pricing Proposal complies with IPART Determination: *Transport – maximum fares for Opal services*.

We recommend TfNSW review the opportunities to incorporate best practice model design features in the average fare models with a mind to incorporating these, where possible, ahead of the 2017-18 pricing proposal.

¹ IPART, *Transport – maximum fares for Opal services: Determination*, May 2016.

1 Background and context for the QA review

1.1 IPART's Determination: *Transport–maximum fares for Opal services*

On 20 May 2016, The Independent Pricing and Regulatory Tribunal of NSW (IPART) determined the maximum fares to apply from July 2016 to June 2019 for all Opal Sydney services in Sydney and surrounds (covering rail, light rail, buses and ferries).

IPART's Determination was issued in the form of a maximum weighted average price change. Average Adult Fares can:

- Increase by a maximum of 13% (including inflation) over the 3 years to June 2019; and
- Increase by up to 6.6% including inflation in 2016-17.

As part of IPART's Determination:

- Transport for New South Wales (TfNSW) is required to provide IPART with a pricing proposal at least 20 business days before any proposed changes to fares can occur²;
- The pricing proposal must set out the proposed and existing Fares for Opal Services, the proposed Trip Distribution based on price and Trip data on the use of Opal Services available to Transport for NSW and any additional supporting information necessary³; and
- IPART then assesses the proposal for compliance with the Determination and issues a compliance statement.

1.2 TfNSW Pricing Proposal

The TfNSW Pricing Proposal⁴ identifies three Fare Change Events⁵:

1. Retirement of remaining paper tickets, effective 1 August 2016.

² This includes, if, after the Commencement Date, Transport for NSW proposes to increase the Adult Fare, modify any of the parameters used to calculate the Fare for a Trip, introduce one or more new Tickets or Opal Cards, or discontinue one or more existing Tickets or Opal Cards. IPART, Transport – maximum fares for Opal services: Determination, May 2016, Schedule 1.

³ IPART, Transport – maximum fares for Opal services: Determination, May 2016, Schedule 1.

⁴ Transport for New South Wales (TfNSW), *2016-17 Fares for Opal Services Pricing Proposal*. Received on 22 July 2016

⁵ As defined by clause 4 of Schedule 1 of IPART, Transport – maximum fares for Opal services: Determination, May 2016.

2. Increasing the price of Opal Single Trip Tickets consistent with achieving a 20% price premium above equivalent Opal card fares, effective 5 September 2016.
3. Amending Opal card benefits, by introducing a transfer discount of \$2.00 for adults for transfers between transport modes within 60 minutes and reducing the discount for Travel Reward from 100% to 50% after eight paid journeys in the week, effective 5 September 2016.

The proposed fares for 2016-17 resulting from these Fare Change Events are set out in **Attachment A**.

The TfNSW pricing proposal states that the impact of these changes results in an estimated increase in average Adult fares for Opal services from \$2.49 (excl. GST) to \$2.56 (excl. GST) an increase of 3.0%.⁶

1.3 Scope of the QA review

Frontier Economics was engaged by IPART to undertake a Quality Assurance (QA) check of the TfNSW pricing proposal and to provide assurances that the data and calculations used can be extracted and replicated to give average fares that comply with IPART's Determination.

Specifically IPART was requested to provide assurance that for:

- The Average Adult Fare for 2015-16:
 - That the data used by TfNSW can be traced back to source data or information reflecting the number of trips on Opal Services made for the 2015-16 period (or part thereof) under an Opal Card and under a Ticket. For trips under an Opal Card this would include extracting relevant data using SQL queries from TfNSW systems.
 - The data from these trips are used to correctly calculate weights in a Trip Distribution for all Adult Fares payable during the 2015-16 period and that this calculation can be replicated.
 - The Average Adult Fare is correctly calculated using this Trip Distribution and that this calculation can be replicated.
- The Average Adult Fare for 2016-17:
 - The representative period in 2015-16 that TfNSW proposes to use as the starting point for the 2016-17 Trip Distribution is reasonable, including QA of sensitivity analysis on the impact of using alternative assumptions.
 - The data used by TfNSW can be traced back to source data or information reflecting number of trips on Opal Services made during the representative period in 2015-16 under an Opal Card and under a Ticket. For trips under

⁶ Transport for New South Wales (TfNSW), *2016-17 Fares for Opal Services Pricing Proposal*, p1.

an Opal Card this would include extracting relevant data using SQL queries from TfNSW systems.

- Any assumptions that are made by TfNSW in calculating the proposed Trip Distribution for 2016-17 from the representative period in 2015-16 are documented.
- Any assumptions in calculating the proposed Trip Distribution for 2016-17 from the representative period in 2015-16 are correctly used to calculate weights in the proposed Trip Distribution and that this calculation can be replicated.
- The Average Adult Fare is correctly calculated using this Trip Distribution and that this calculation can be replicated.

IPART provided Frontier Economics with a copy of the draft TfNSW pricing proposal and supporting average fare models (in Microsoft Excel) on 11 July 2016. A pricing proposal and average fare model for 2016-17 was provided on 14 July along with some background notes. Further information was also provided by TfNSW in the period 14-26 July. Further revised pricing proposals and average fare models were provided on 22 and 26 July along with further supporting information.

1.4 Our approach to the review and structure of this report

Our approach to this QA is structured around answering several broad questions:

- ***Does the TfNSW pricing proposal reflect the fares and calculations in the average fare models?*** For example:
 - Is the reported increase in Average Adult Fares for Opal services of 3.0% reflective of the proposed fares in 2016-17?
 - Are the reported customer impacts in 2016-17 reflective of the proposed fares in 2016-17?
- ***Do the average fare models do what they are supposed to do?*** For example, checking whether the:
 - Logic and structure of the average fare models are reasonable in the circumstances
 - Trip Distributions have been used appropriately such that the models calculate average fares in a way that complies with IPART's Determination
 - Calculation of Average Adult Fares can be replicated.
- ***What assumptions does it rely on and are they correctly used?*** For example:
 - Documenting any assumptions that are used to calculate weights and checking them back to source data, such as the number of trips on Opal

Services made for the 2015-16 period (or part thereof) under an Opal Card and under a Ticket.

- Checking whether these assumptions have been used correctly to calculate weights in a Trip Distribution.
- ***How reasonable are the assumptions?*** For example, testing whether assumptions are reasonable in the circumstances given their materiality or impact on the Average Adult Fare and the availability of alternative assumptions (including approaches to estimating assumptions).

This report is structured in the following manner:

- Section 2 sets out an overview of the average fare models including how they estimate Average Adult Fares, lists the key assumptions used in the models and their source, and outlines how TfNSW has estimated the impacts of the proposed fares for 2016-17 on customers.
- Section 3 provides our overall findings and assessment of TfNSW Pricing Proposal's compliance with IPART Determination.

2 TfNSW pricing proposal and calculation of Average Adult Fares

2.1 Calculation of average Adult Fare for 2015-16

As set out in Table 1, TfNSW has calculated an average Adult Fare for 2015-16 of \$2.49 (excluding GST).

Table 1: Average Adult Fare 2015-16 by Product

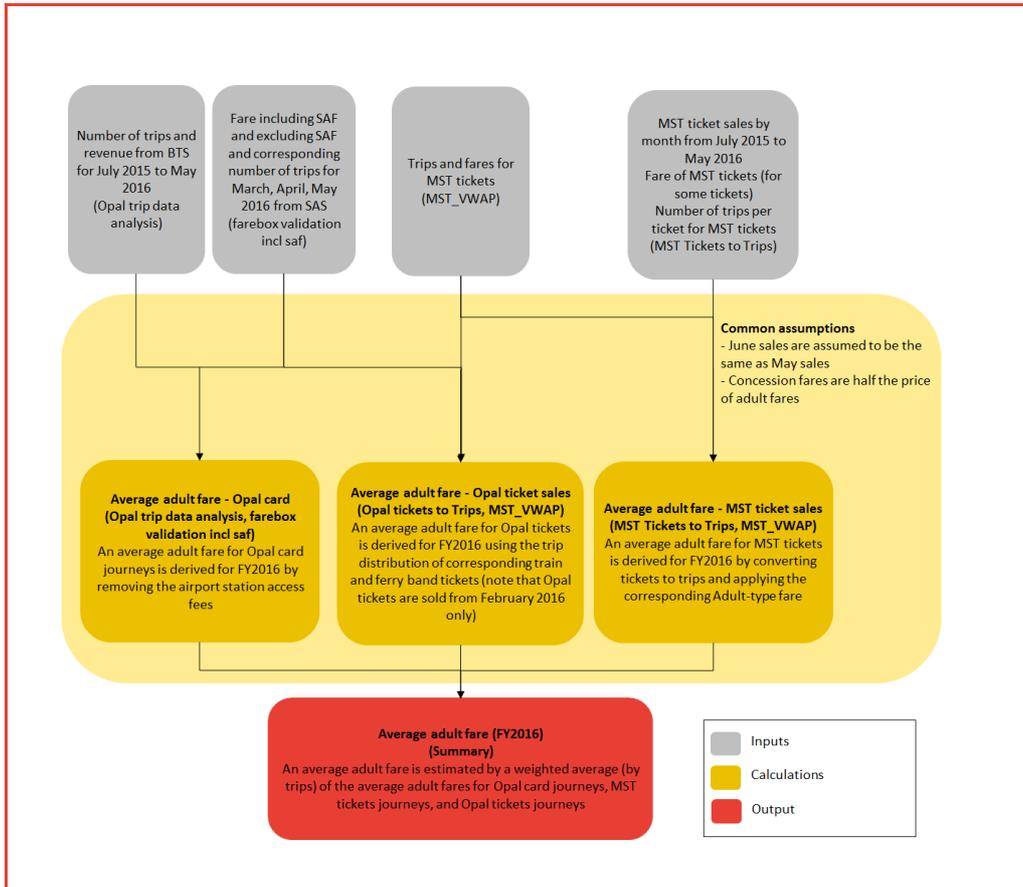
Product Group	Trips 2015-16 (000s)	Average Adult Fare 2015-16
Opal card	457,823	\$2.32
Ticket	55,167	\$3.86
TOTAL	512,990	\$2.49

Source: TfNSW Pricing Proposal

As shown in Figure 1 this fare is based on a trip weighted average price for qualifying travel on tickets and on Opal cards for the year from 1 July 2015 to 30 June 2016⁷ and its calculation involves several steps and key inputs and assumptions.

⁷ This price includes 11 months of observed behaviour (through 31 May 2016) and one month of forecast behaviour (June 2016). The forecast month is assumed to comprise the same average Adult fare as the month of May 2016.

Figure 1: Steps for the calculation of Average Adult Fare in 2015-16



Source: Frontier Economics
 MST: Magnetic Stripe Ticket
 BTS: Bureau of Transport Statistics
 SAS: Statistical Analysis System is a software suite for data management
 SAF: Station Access Fee

Box 2: What is a Trip Distributions are why are they needed to calculate an Average Adult Fare?

IPART’s Determination was issued in the form of a maximum weighted average price change. This form of regulation requires TfNSW to calculate an Average Adult Fare based on the numerous travel product types (including Adult and Concession travel using Opal cards and paper tickets).

To calculate this Average Adult Fare a ‘Trip Distribution’ is required, which reflects the number of Trips taken for an Adult Fare as a proportion of total Trips taken for that period.

IPART’s Determination requires TfNSW to propose a Trip Distribution based on price and Trip data on the use of Opal Services.

For 2015-16 TfNSW proposed constructing a ‘Trip Distribution’ based on 11 months of actual Trip data and one month (June 2016) of estimated data, with June 2016 assumed to equal actual Trips in May 2016.

For 2016-17 TfNSW proposed constructing a ‘Trip Distribution’ drawing on selected representative periods of ticket sales data from 2015-16 including:

- 2 months of actual ticket data for MST tickets; and

- 2 weeks (weeks commencing 25 April and 2 May 2016) of actual opal ticket sales data.

TfNSW calculated the average fare in any one month using the average of the fare estimated using a normal week trip distributions and a holiday week trip distributions weighted by the number of holiday weeks in that month. TfNSW have used this approach given the following two changes which they consider make much of the ticket sales data from 2015-16 unrepresentative of 2016-17.

- System changes effective 28 March 2016 changed the journey continuation rules for all modes; and
- Vivid Sydney commencing in late May 2016 with additional services to standard operations.

2.2 Calculation of average Adult Fare for 2016-17

As set out in Table 2, TfNSW has calculated an average Adult Fare for 2016-17 of \$2.56 (excluding GST).

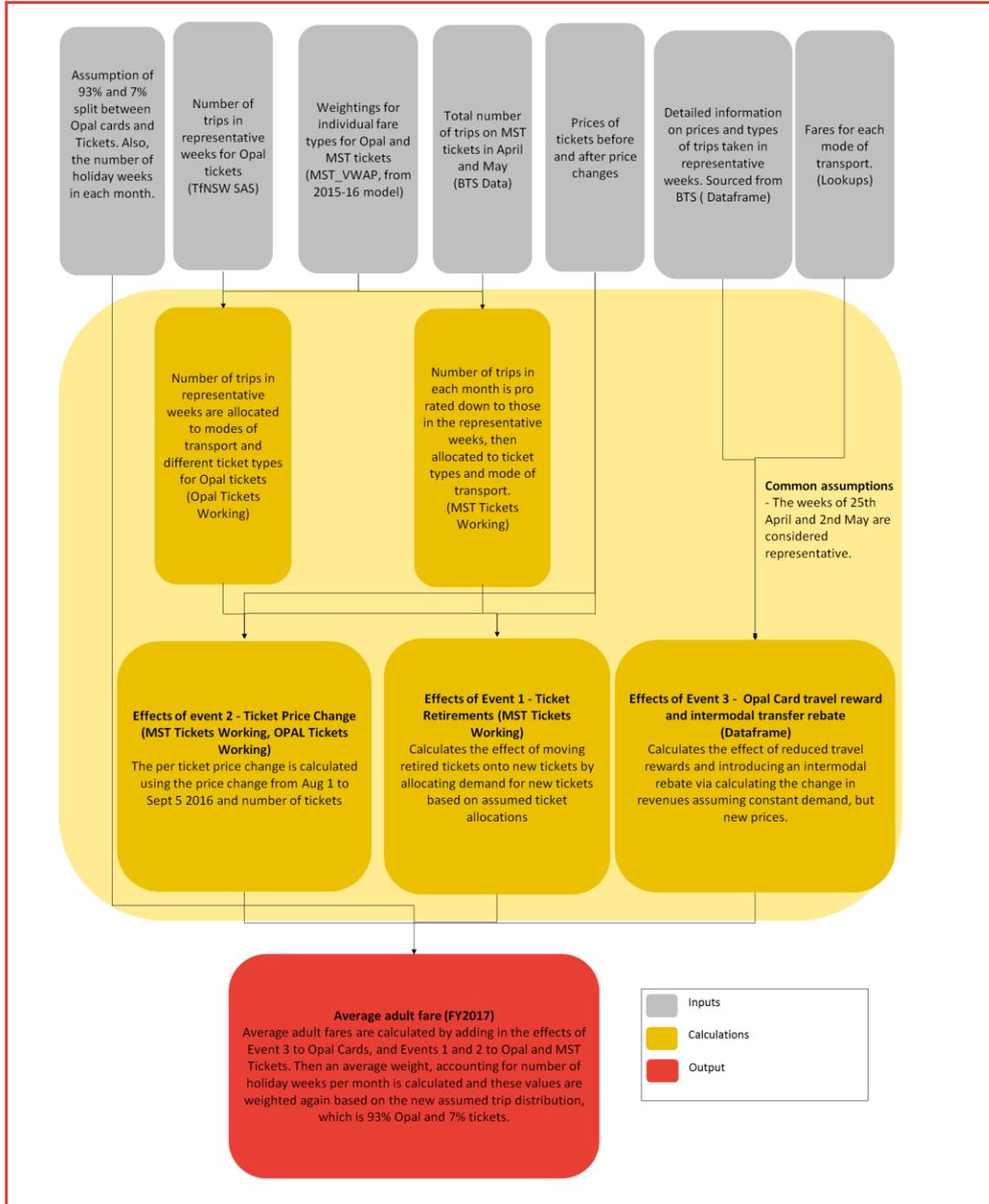
Table 2: Average Adult Fare 2016-17 by Product Type

Product Group	Trip Weighting	Average Adult Fare 2016-17
Opal card	93.0%	\$2.43
Ticket	7.0%	\$4.36
TOTAL	100.0%	\$2.56

Source: TfNSW Pricing Proposal

As shown in Figure 2 this fare consists of a weighting of average fares across pre-and-post fare change event periods for each product group (equal weighting by month) followed by a volume weight of the product group annual averages.

Figure 2: Steps for the calculation of Average Adult Fare in 2016-17



Source: Frontier Economics
 MST: Magnetic Stripe Ticket
 BTS: Bureau of Transport Statistics
 SAS: Statistical Analysis System is a software suite for data management
 SAF: Station Access Fee

2.3 Estimation of impact of proposed fares and Fare Change Events

TfNSW has estimated the impact of the proposed fares including the separate and total impact of the Fare Change Events as set out in Table 3.

Table 3: 2016-17 Average Adult Fare calculation by fare change event

Month(s)	Event	Holiday Wks		Ave Adult Fare - Opal	Opal Weight	Trip	Ave Adult Fare - Ticket
Jul16		–	–	\$2.32	93%	\$4.07	\$2.45
Aug16	1	–	–	\$2.32	93%	\$4.07	\$2.45
Sep16	2 & 3	–	–	\$2.45	93%	\$4.42	\$2.58
Oct16- Jun17		9	23%	\$2.45	93%	\$4.42	\$2.59
Full Year		9	17%	\$2.43	93%	\$4.36	\$2.56

Source: TfNSW Pricing Proposal

TfNSW has also estimated that the move in Average Adult Fare between the proposed fare structure and the existing fare structure for the Normal week is \$0.12 (Holiday week \$0.04). This comprises an increase from travel reward changes of \$0.28 (\$0.20) and a decrease from the intermodal transfer discount of \$0.16 (\$0.16).

3 Summary of our findings and assessment of TfNSW Pricing Proposal’s compliance with IPART Determination

3.1 Average Adult Fare for 2015-16

We have reviewed the logic, calculations and assumptions underlying the pricing proposal and are satisfied that the Average Adult Fare for 2015-16 in the TfNSW Pricing Proposal has been calculated appropriately.

Table 4: Average Adult Fare for 2015-16: Frontier Economics’ key findings in QA of TfNSW Pricing Proposal for compliance with IPART Determination:

Scope of QA	Frontier Economics finding	Frontier Economics assurance
Check that the data used by TfNSW can be traced back to source data or information reflecting the number of trips on Opal Services made for the 2015-16 period (or part thereof) under an Opal Card and under a Ticket.	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> The data reflects source information on the number of trips on Opal Services made for the 2015-16 period (or part thereof) 	Assumptions used in the calculation of the Trip Distribution for 2015-16 can either be traced to source data and/or these assumptions are documented (refer QA log).
Check that the data from these trips are used to correctly calculate weights in a Trip Distribution for all Adult Fares payable during the 2015-16 period and that this calculation can be replicated.	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> The calculation of Average Adult Fare in 2015-16 is sensitive to the Trip Distribution, however the Average Adult Fare is not sensitive to the estimate for June 2016 (given there is 11 months of actual data⁸) While there is variability in the monthly number of Adult Trips over 2015-16 period, and there are a range of approaches to estimate June 2016 trips in calculating the Trip Distribution for 2015-16 (for example, estimating June 2016 using most recent data e.g. 	These assumptions are reasonable in the circumstances and correctly used to calculate weights in the Trip Distribution for 2015-16 and this calculation can be replicated.

⁸ For example, using April 2016 or another month as an estimate for June 2016 did not materially impact the Average Adult Fare.

	<p>May 2016 as per TfNSW proposal, or using a trend based on earlier data), TfNSW's approach is reasonable in the circumstances</p> <ul style="list-style-type: none"> • These assumptions are correctly used to calculate weights in the Trip Distribution for 2015-16 and this calculation can be replicated 	
<p>Check that the Average Adult Fare is correctly calculated using this Trip Distribution and that this calculation can be replicated.</p>	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> • Logic and structure of the average fare model is reasonable in the circumstances (however there opportunities to incorporate best practice model design features in the models) • Inputs have been correctly sourced • The model correctly uses this Trip Distribution • Key calculations can be replicated 	<p>The Average Adult Fare is correctly calculated using this Trip Distribution and key calculations can be replicated.</p>

Source: Frontier Economics analysis

3.2 Average Adult Fare for 2016-17

We have reviewed the logic, calculations and assumptions underlying the pricing proposal and are satisfied that the Average Adult Fare for 2016-17 in the TfNSW Pricing Proposal has been calculated appropriately.

Table 5: Average Adult Fare for 2016-17: Frontier Economics' key findings in QA of TfNSW Pricing Proposal for compliance with IPART Determination:

Scope of QA	Frontier Economics finding	Frontier Economics assurance
<p>Check that the representative period in 2015-16 that TfNSW proposes to use as the starting point for the 2016-17 Trip Distribution is reasonable, including QA of sensitivity</p>	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> • The calculation of Average Adult Fare in 2016-17 is sensitive to the assumed Trip Distribution • There are range of approaches and time periods to use in determining a Trip Distribution in 2016-17 with each approach balancing a range of risks.⁹ 	<p>TfNSW proposed representative period in 2015-16 for the 2016-17 Trip Distribution is reasonable in the circumstances.</p> <p>Key assumptions that are made by TfNSW</p>

⁹ While the TfNSW proposed approach involves a short time period which risks a non-representative starting point that may bias the sample trip distribution, this must be considered against the alternative

<p>analysis on the impact of using alternative assumptions.</p> <p>Check that any assumptions that are made by TfNSW in calculating the proposed Trip Distribution for 2016-17 from the representative period in 2015-16 are documented.</p>	<ul style="list-style-type: none"> • We consider it reasonable to conclude that TfNSW’s approach to estimating the trip distribution may be more representative of 2016-17 than the Trip Distribution used for estimating the 2015-16 Average Adult Fare and that the choice of period is reasonable. We note that this approach leads to a larger increase of 0.7% in the Average Adult Fare from 2015-16 (i.e. the assumed Trip Distribution may overstate the increase in Average Adult Fare as a result of the proposed fare changes). • Key assumptions that are made by TfNSW in calculating the proposed Trip Distribution for 2016-17 from the representative period in 2015-16 are documented. 	<p>in calculating the proposed Trip Distribution for 2016-17 from the representative period in 2015-16 are documented.</p>
<p>Check that the data used by TfNSW can be traced back to source data or information reflecting number of trips on Opal Services made during the representative period in 2015-16 under an Opal Card and under a Ticket.</p>	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> • The data reflects source information on the number of trips on Opal Services made for the 2015-16 period (or part thereof). 	<p>These assumptions are correctly used to calculate weights in the Trip Distribution for 2015-16 and this calculation can be replicated.</p>
<p>Check that any assumptions in calculating the proposed Trip Distribution for 2016-17 from the representative period in 2015-16 are correctly used to calculate weights in the proposed Trip Distribution and that this calculation can be replicated.</p>	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> • Assumptions used to calculate weights in the Trip Distribution for 2015-16 are appropriately used and this calculation can be replicated. 	<p>These assumptions are appropriately used to calculate weights in the Trip Distribution for 2015-16 and this calculation can be replicated.</p>
<p>Check that the Average Adult Fare is correctly calculated using this Trip Distribution and that this calculation can be replicated</p>	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> • Logic and structure of the average fare model is reasonable in the circumstances (however there opportunities to incorporate best practice model design features in the models). • Inputs have been correctly sourced 	<p>The Average Adult Fare is correctly calculated using this Trip Distribution and that key calculations can be replicated.</p>

of using a longer time period where the trip distribution may have been affected by structural changes that will continue to have a lasting effect on trip distribution.

- The model correctly uses this Trip Distribution
- Key calculations can be replicated

Source: Frontier Economics analysis

3.3 Estimation of impact of proposed fares and Fare Change Events

We have reviewed the logic, calculations and assumptions underlying the estimated impact of the proposed fares as set out in Table 6.

Table 6: Estimation of impact of proposed fares and Fare Change Events: Frontier Economics' key findings in QA of TfNSW Pricing Proposal for compliance with IPART Determination

Scope of QA	Frontier Economics finding	Frontier Economics assurance
Is the reported increase in Average Adult Fares for Opal services of 3.0% reflective of the proposed fares in 2016-17?	<p>Our QA finding is that the Average Adult Fare of \$2.56 in 2016/17, and the estimated increase 3.0%, is likely to be an upper bound given:</p> <ul style="list-style-type: none"> • TfNSW have adopted a conservative estimate of the impact of structural Ticket changes on 16/17 Trip Distribution (i.e. the assumed starting point for the 2016-17 Trip Distribution may overstate the increase in Average Adult Fare as a result of the proposed fare changes.) • Potential for declining use of Tickets relative to Opal Card¹⁰ 	The increase in the Average Adult Fare in 2016-17 is unlikely to be larger than 3.0%.
Are the reported impacts of the Fare Change Events calculated correctly?	<p>Our QA finding is that:</p> <ul style="list-style-type: none"> • These calculations can be replicated. 	The impacts of the Fare Change Events on the Average Adult Fare in 2016-17 are calculated correctly and can be replicated.

¹⁰ TfNSW assumes a static assumption regarding the split between in Tickets and Opal Cards. TfNSW modelling of sensitivities suggests that further declines in Ticket usage has small impact average fares.

3.4 Overall assessment of TfNSW Pricing Proposal's compliance with IPART Determination

Frontier Economics was engaged by IPART to undertake a QA check of TfNSW's pricing proposal and to provide assurances to IPART that the data and calculations used to calculate Average Adult Fares for 2015-16 and 2016-17 comply with IPART's Determination.

We have reviewed the logic, calculations and assumptions underlying the pricing proposal and are satisfied that the Average Adult Fare for 2015-16 and 2016-17 in the TfNSW Pricing Proposal have been calculated appropriately..

- Assumptions used in the calculation of the Trip Distribution can either be traced to source data or information reflecting the number of trips on Opal Services made for the 2015-16 period (or representative 2015-16 period) under an Opal Card and under a Ticket and/or these assumptions are documented and reasonable in the circumstances
- These assumptions are correctly used to calculate weights in the Trip Distribution and this calculation can be replicated
- The Average Adult Fare is correctly calculated using this Trip Distribution and that this calculation can be replicated.

On this basis we can provide assurance that the proposed increase in the Average Adult Opal fare does not exceed 6.6% including inflation and that the TfNSW Pricing Proposal complies with IPART Determination: *Transport – maximum fares for Opal services.*

We recommend TfNSW review the opportunities to incorporate best practice model design features in the average fare models with a mind to incorporating these, where possible, in the 2017-18 pricing proposal.

Attachment A: TfNSW proposed fares for 2016-17

Table 7: TfNSW proposed ticket retirements

Ticket	Current Price	Replacement	1 Aug 2016 Price	Impact
MyTrain 1 Single	\$4.00	Train Band 1 Single	\$4.00	–
MyTrain 2 Single	\$4.80	Train Band 2 Single	\$4.80	–
MyTrain 3 Single	\$5.40	Train Band 3 Single	\$5.40	–
MyTrain 4 Single	\$7.00	Train Band 4 Single	\$7.00	–
MyTrain 5 Single	\$8.80	Train Band 5 Single	\$8.80	–
MyFerry 1 Single	\$6.20	Ferry Band 1 Single	\$6.20	–
MyFerry 2 Single	\$7.60	Ferry Band 2 Single	\$7.60	–
MyBus 1 Single	\$2.40	Bus Band 1 Single	\$2.40	–
MyBus 2 Single	\$3.80	Bus Band 2 Single	\$3.80	–
MyBus 3 Single	\$4.70	Bus Band 3 Single	\$4.70	–
Newcastle Ferries Single (Stockton Ferry)	\$2.60	Newcastle Ferries Band 1 Single	\$2.60	–
Light Rail 1 Zone Single	\$3.80	Light Rail Band 1 Single *	\$2.40	(37%)
		Light Rail Band 2 Single *	\$3.80	–
Light Rail 2 Zones Single	\$4.80	Light Rail Band 1 Single *	\$2.40	(50%)
		Light Rail Band 2 Single *	\$3.80	(21%)
Light Rail 1 Zone Return	\$5.20	2x Light Rail Band 1 Single *	\$4.80	(8%)
		2x Light Rail Band 2 Single *	\$7.60	46%
Light Rail 2 Zones Return	\$6.40	2x Light Rail Band 1 Single *	\$4.80	(25%)
		2x Light Rail Band 2 Single *	\$7.60	19%
Newcastle Bus 1-Hour	\$3.80	Bus Band 1 Single *	\$2.40	(37%)
		Bus Band 2 Single *	\$3.80	–
		Bus Band 3 Single *	\$4.70	24%
Moore Park Single (Sportsground)	\$3.50	No change	\$3.50	–
Moore Park Return (Sportsground)	\$6.00	No change	\$6.00	–
Randwick Racecourse Single	\$3.50	No change	\$3.50	–
Randwick Racecourse Return	\$6.00	No change	\$6.00	–

* No direct replacement

Source: TfNSW Pricing Proposal

Table 8: TfNSW proposed increases to Opal Single Trip ticket prices

Ticket	1 Aug 2016 Ticket	5 Sept 2016 Ticket	Impact	5 Sept 2016 Card*	Ticket vs Card
Train Band 1 Single	\$4.00	\$4.10	2%	\$3.38	21%
Train Band 2 Single	\$4.80	\$5.10	6%	\$4.20	21%
Train Band 3 Single	\$5.40	\$5.80	7%	\$4.82	20%
Train Band 4 Single	\$7.00	\$7.80	11%	\$6.46	21%
Train Band 5 Single	\$8.80	\$10.00	14%	\$8.30	20%
Ferry Band 1 Single	\$6.20	\$6.90	11%	\$5.74	20%
Ferry Band 2 Single	\$7.60	\$8.70	14%	\$7.18	21%
Bus Band 1 Single	\$2.40	\$2.60	8%	\$2.10	24%
Bus Band 2 Single	\$3.80	\$4.20	11%	\$3.50	20%
Bus Band 3 Single	\$4.70	\$5.40	15%	\$4.50	20%
Newcastle Ferries Band 1 Single	\$2.60	\$2.60	–	\$2.10	24%
Light Rail Band 1 Single	\$2.40	\$2.60	8%	\$2.10	24%
Light Rail Band 2 Single	\$3.80	\$4.20	11%	\$3.50	20%
Moore Park Single (Sportsground)	\$3.50	\$3.50	–	n/a	n/a
Moore Park Return (Sportsground)	\$6.00	\$6.00	–	n/a	n/a
Randwick Racecourse Single^	\$3.50	\$3.50	–	n/a	n/a
Randwick Racecourse Return^	\$6.00	\$6.00	–	n/a	n/a

^ Special event tickets; * Opal card adult peak fares

Table 9: TfNSW proposed Opal card fare and benefits

Fares	Current Price	5 Sept 2016
Train Band 1 (Peak)	\$3.38	\$3.38
Train Band 2 (Peak)	\$4.20	\$4.20
Train Band 3 (Peak)	\$4.82	\$4.82
Train Band 4 (Peak)	\$6.46	\$6.46
Train Band 5 (Peak)	\$8.30	\$8.30
Train Band 1 (Off-Peak)	\$2.36	\$2.36
Train Band 2 (Off-Peak)	\$2.94	\$2.94
Train Band 3 (Off-Peak)	\$3.37	\$3.37
Train Band 4 (Off-Peak)	\$4.52	\$4.52
Train Band 5 (Off-Peak)	\$5.81	\$5.81
Ferry Band 1	\$5.74	\$5.74
Ferry Band 2	\$7.18	\$7.18
Bus Band 1	\$2.10	\$2.10
Bus Band 2	\$3.50	\$3.50
Bus Band 3	\$4.50	\$4.50
Light Rail Band 1	\$2.10	\$2.10
Light Rail Band 2	\$3.50	\$3.50
Newcastle Ferries Band 1	\$2.10	\$2.10
Benefits	Current Price	5 Sept 2016
Daily Cap (Mon to Sat)	\$15.00	\$15.00
Sunday Cap	\$2.50	\$2.50
Weekly Cap	\$60.00	\$60.00
Travel Reward	100% after 8 paid journeys in week	50% after 8 paid journeys in week
Intermodal transfer rebate	\$0.00 per transfer	\$2.00 per transfer

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