

# Weekday peak and off-peak fares

Final Report – Information Paper 1

# Introduction

Currently, weekday peak and off-peak fares apply on rail services only:

- ▼ Peak rail fares are 30% higher than off-peak rail fares
- ▼ Peak rail fares apply when the tap-on time is within the following periods:
  - ▼ 7.00-9.00 AM, Monday to Friday for Sydney Trains services
  - ▼ 6.00-8.00 AM, Monday to Friday for NSW TrainLink (intercity) services
  - ▼ 4.00-6.30 PM, Monday to Friday for both rail services.
- ▼ Neither the location nor direction of a trip affect whether it is defined as peak or off-peak.

As part of our review, we considered whether these arrangements for peak and off-peak fares:

- ▼ should be changed for rail services, and
- ▼ should be extended to bus, light rail and ferry services.

The slides that follow set out our final decisions, and explain why we reached those decisions.

# Final recommendations

Our final recommendation is that the current weekday peak and off-peak fare arrangements for rail services should be maintained, and the price differential should increase so off-peak fares are 40% lower than peak fares. This reflects our findings that:

- ▼ The socially optimal fare for rail services differs significantly between the peak and off-peak periods, and the difference is greater than 30% (the current price differential)
- ▼ The current time periods for peak fares continue to be appropriate as they represent peak road congestion and it is reasonable to define peak trips using the tap-on time
- ▼ There is no strong evidence to support limiting peak fares to passengers travelling in the peak direction or to those travelling to or through particular stations.
- ▼ In addition, our final recommendation is that weekday peak and off-peak fares should not be extended for bus, ferry and light rail services. Unlike for rail, the socially optimal fares for buses in the off-peak fall within the range of socially optimal fares for the peak. For ferries, current peak patronage does not coincide with peak congestion in the transport network.

# Why have peak and off-peak fares?

There are several reasons why it may be efficient to charge higher public transport fares during weekday peak periods:

- ▼ The marginal cost of providing services is higher in peak periods, as capacity-related costs are incurred to serve the times of highest demand
- ▼ Road congestion is higher in the peak, so there may be a higher external benefit of public transport use
- ▼ Higher peak fares may help spread demand more evenly across the day, which could reduce capacity-related costs and make services less crowded
- ▼ Lower fares in off-peak times, when people's travel may be relatively elastic (price sensitive), may improve cost recovery, provided the additional passengers do not impose additional costs on the system over and above what they pay in fares.

However, the relevance of each of these reasons differs across modes. For example, our analysis shows that:

- ▼ For rail, peak demand and the peak for marginal cost, and the highest external benefits occur during weekday peak periods
- ▼ For bus, a peak in the marginal cost occurs during weekday peak periods, but it is much smaller because bus capacity costs are lower as a proportion of total costs
- ▼ For ferry, a peak in the marginal cost occurs on the weekend (particularly Sunday for many services) rather than weekdays.

# Rail services

## When should peak fares apply?

- ▼ Currently, a peak rail fare applies when the passenger's Opal tap-on time is within defined time bands in the weekday AM and PM
- ▼ In our view, the use of tap-on time is an adequate approximation of when the travel occurs. There is unlikely to be a benefit from moving to the tap-off time unless other changes to the peak fare arrangements are made – for example, if peak fares depended on the location or direction of travel
- ▼ Crowding statistics suggest there is a peak within the current peak time bands. However, we do not consider that a higher fare should apply for this shorter time period because:
  - ▼ This may have significant customer impacts
  - ▼ We do not have enough information about how it would influence travel patterns and what impact that would have on costs and revenue
  - ▼ The external benefits of rail use are likely to be high across the whole of the current peak time bands
- ▼ Therefore, we consider that the current time periods and use of tap-on time to define peak trips should be maintained.

# Rail services

Should peak fares apply only to people travelling in the peak direction?

- ▼ All passengers who travel to, from, or through busy train stations in the weekday peak periods are likely to contribute to rail capacity costs – regardless of their direction of travel
- ▼ If peak fares only applied to those travelling in the ‘peak direction’ (eg, towards the Sydney CBD in the AM), the fare for those travelling in the contra-peak direction would not recognise their contribution to these costs
- ▼ Therefore, we do not consider it appropriate for peak fares to be limited to passengers travelling in the peak direction

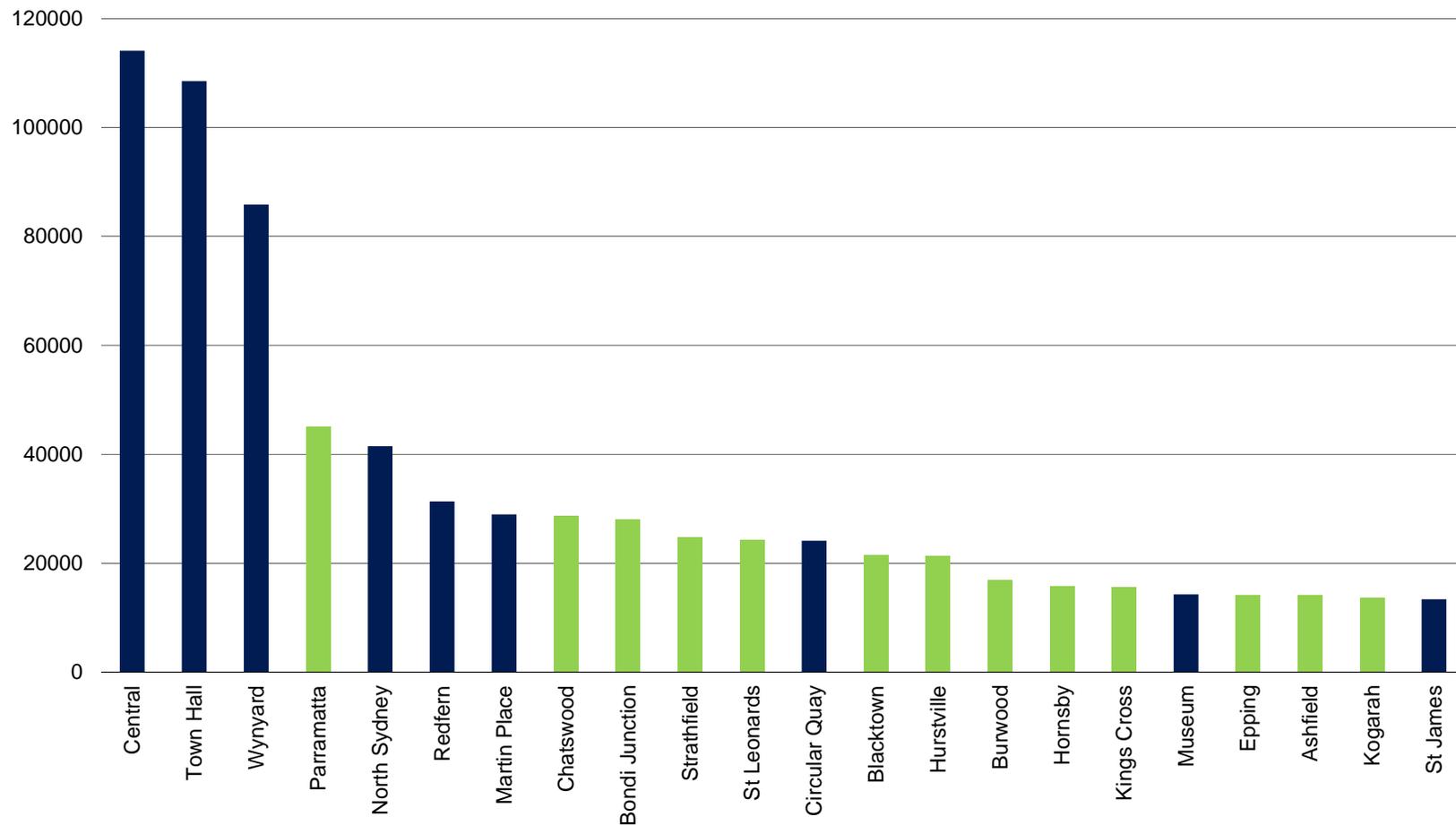
# Rail services

Should peak fares apply only to people travelling to or through the City?

- ▼ If the higher capacity costs associated with peak periods were being driven largely by passengers travelling to or through the City, then it may be efficient to limit peak fares to those who tap on or off at a City station
- ▼ Our analysis indicates that the City is a bottleneck location during the weekday peak periods:
  - ▼ Around 40% of all weekday Opal journeys involve a tap on or off during the current peak time bands at one of the City stations (City Circle plus Redfern and North Sydney)
- ▼ However, many other stations are also very busy during these periods:
  - ▼ Parramatta is the fourth busiest train station in the peak after Central, Town Hall and Wynyard
  - ▼ More than half of the 20 busiest stations in the peak are outside the City area (City Circle plus Redfern and North Sydney) (see next slide)
- ▼ Therefore, we do not consider it appropriate for peak fares to be limited to passengers travelling to or through the City.

# Busiest stations – Number of Opal tap ons & offs during current peak periods

Based on Transport for NSW data over a 24 hour period (2014)



# Rail services

Should peak fares apply only to people travelling to or through the busiest stations?

- ▼ As discussed above, several of the busiest stations in the peak are some distance from the city:
  - ▼ These stations are busy in part because they are destination stations for people who work in the area
  - ▼ Delivering passengers to these stations at peak times adds to capacity costs as they want to arrive at the same time as those travelling to the City
- ▼ One way to address this would be to limit peak fares to people travelling to these other busy stations as well as the City stations
- ▼ However, as the network is more effective if interchange between services occurs at busy stations, this approach may drive up network costs by pushing people onto smaller stations with less capacity to deal with large numbers of passengers
- ▼ Therefore, we do not consider it appropriate to limit peak fares to those travelling to or through the busiest stations.

# Bus, ferry and light rail services

Should weekday peak fare arrangements be extended to these services?

- ▼ Fares for buses, ferries and light rail do not currently vary by time of day
- ▼ We found that the evidence does not support introducing peak/off-peak price differences for these services:
  - ▼ Our analysis suggests that the socially optimal bus fares in the off-peak fall within the range of socially optimal fares for the peak.
  - ▼ For ferries, current peak patronage does not coincide with peak congestion in the transport network.
  - ▼ Given that single fares are administratively simpler, we consider they should be maintained unless there is clear evidence that a peak/off-peak price difference is warranted.
- ▼ Our final recommendation is that there should be no weekday peak/off-peak fare differential for buses, ferries or light rail.

# Peak and off-peak fares in future

- ▼ We propose that at the next review of public transport fares we will review whether peak demand for ferries has changed in response to price changes that may warrant the introduction of an off-peak fare.
- ▼ We also note that for rail, but not for bus, TfNSW collects and publishes information on load statistics by line which can be used to identify the extent of crowding issues in the peak and assist in defining peak periods.
- ▼ We consider TfNSW should publish similar information on load statistics for buses and light rail. This would inform decisions on peak and off-peak fares in future fare reviews.