

## City Zone boundary: Analysis of options for Orakei station

Although submissions were generally happy with the proposed zone boundaries, limited concerns were raised at the proposal to locate Orakei rail station in the Isthmus zone. This would result in rail passengers from Orakei to Britomart being charged a 2-zone fare, compared with the current 1-stage fare on rail. The impact of this is an increase from \$1.70 to \$3.00 for an adult HOP passenger.

The October 2014 Integrated Fares Business Case report specifically addressed the location of the city centre zone boundary, and noted that it will have an impact on the cost of travel for customers located close to the boundary. The report included the following assessment of the options considered:

Option	Comment
Retain the current 1 stage boundary	Minimises impact on existing customers, although there are some anomalies with the current boundary, especially in Orakei where the bus and rail stage boundaries are in different locations.
Generally retain the current 1 stage boundary but adjust where existing anomalies	Minimises impact on most existing customers, and provides a more coherent and consistent boundary by removing current anomalies (e.g. aligning the bus and rail boundary in Orakei, and shifting the Mt Eden boundary to the village centre). This will affect some 1 stage passengers who will now face a 2 zone.
Draw a tighter city-centre zone, by aligning the boundary with the current Inner Link bus route.	Would result in a more coherent definition of “city centre”, but would shift a number of residential areas which currently enjoy a 1-stage fare to the city centre outside the boundary (especially in the inner western suburbs such as Grey Lynn and Kingsland). Many users from these areas would incur a significant increase in fares (i.e. 1 stage to 2 zone), with a risk to patronage.
Extend the city centre zone to include a larger area, with a boundary along the St Lukes-Balmoral-Greenlane corridor	This would also result in a more coherent and recognisable boundary, but would have some negative revenue impacts as a significant number of existing 2-stage trips would become 1-zone.

The report recommended the second option, that the boundary be drawn to generally coincide with the current stage boundary for a 1-stage bus trip from the city centre, but to remove the current boundary anomalies (see Figure 1). This approach enables bus and rail fares to be aligned, while minimising the financial impact for most current 1-stage customers, and minimising potential revenue and/or patronage losses.

At Orakei, the boundary is drawn on the western side of Hobson Bay. This reflects the current fare stage for buses and uses the natural geographic boundary. This boundary places Orakei rail station in the Isthmus zone, which addresses the current misalignment of rail and bus fare boundaries in this area. However, it means that rail travel between Orakei and Britomart, currently a 1-stage fare, will now be a 2-zone fare.

This increase has generated negative comments in the submission process. Some submitters have called for Orakei to be included in the City zone; others have suggested that Orakei station be treated as an overlap between the City and Isthmus zones (similar to Newmarket). These options are considered below.

Figure 1: Proposed city centre zone boundary map



### Options considered

Option	Zone boundary description	Orakei to city centre fare
1. Current proposal (Orakei in Isthmus Zone)	Zone boundary as shown in Figure 1 above.	2 zone fare for both bus and rail
2. Orakei station in City Zone	Zone boundary as shown in Figure 1 above, but Orakei Station is treated as part of City Zone. This effectively retains the status quo.	1 zone fare for rail 2 zone fare for bus
3. Shift City Zone boundary east	Zone boundary shifted east to include Orakei Station and surrounding bus stops	1 zone fare for both bus and rail
4. Orakei Station as a zone overlap	Zone boundary as shown in Figure 1 above, but Orakei Station is treated as part of both City and Isthmus Zones	1 zone fare for rail 2 zone fare for bus

### Evaluation

#### Simplicity

An important driver of the zone fares system has been simplicity: a fare system that is easy for customers to understand, with zone boundaries that are logical, and removing existing fare

anomalies and wherever possible. The boundary at Orakei was chosen to follow a natural geographic boundary (Hobson Bay), and to remove the current anomaly where bus and rail fares from the same location are different. Options 2 and 4 would perpetuate this anomaly; Option 3 would allow bus and rail fares to be aligned, but there is no clear and logical boundary which includes Orakei in the City zone. Option 1 is therefore preferred as the simplest and most coherent option.

## Equity

Boundaries have been drawn at locations roughly equidistant from the city centre. This approach has been generally well received in the consultation process (in contrast to the last RTP, where submitters were concerned at perceived inequity of similar distance trips attracting different fares).

The proposed City Zone boundary maintains a reasonably consistent “crow-fly” distance from the city centre, as illustrated in Figure 2.

Zone overlaps have been located at key travel destinations or interchange points that are on or near to zone boundaries (e.g. Newmarket), to allow passengers to access those destinations from both sides of the boundary without paying an additional fare. Orakei is not a significant travel destination or interchange. Including Orakei as an overlap zone (Option 4) may therefore be seen as “special treatment” and inequitable, and could create a precedent for other locations to request similar treatment.

Figure 2: Proposed city centre zone boundary distance overlay



### Impact on existing customers

Orakei station has around 140,000 annual boardings. Of these 110,000 (78%) travel a single stop to Britomart. Under Option 1, these passengers (about 400 per weekday) will face an increase in their fare from the existing 1 stage fare to a 2-zone fare. Conversely, fares for passengers travelling south will decrease.

### Impact on travel behaviour

The station has a park and ride facility with approximately 200 spaces, which is generally full by around 7.30am on weekdays. This suggests that up to 50% of Orakei boardings are from park and ride. Surveys of the origins of park and ride users show that many drive a significant distance to the facility, no doubt motivated by the lower fare than is charged at other closer stations or bus stops. Under zone fares, this price differential will be removed, and passengers more likely to use services closer to their homes. This should reduce demand on the park and ride facility, and local traffic.

The New Network proposals for the central isthmus include an increased number of feeder bus services that will connect with the train at Orakei. Patronage on these services would be adversely impacted if the fare from Orakei station to the city centre was cheaper than the feeder-rail combination fare.

### Revenue impacts

The revenue estimates for the new fare system have assumed that Orakei-city centre rail passengers will pay a 2-zone fare in future. Reverting to a 1 zone fare would result in reduced system revenue of around \$300k p.a. Option 3 which would also result in a loss of bus revenues of around \$40k p.a. There are other objectives to consider such as farebox recover which for Auckland rail is still low. Furthermore, the 'artificial' 1 stage fare has led to a substantial amount of park n ride travel to Orakei to avoid a stage fare.

### Summary evaluation

The table below summarises the option evaluation by showing how Options 2, 3 and 4 perform against the current proposal. Each of the alternatives has a positive financial impact on existing city-bound customers from Orakei, as they would have lower fares than the current proposal. On all of the other criteria, however, Option 1 is preferred. It will enable a simpler and more equitable fare system, with mainly positive impacts on travel behaviour, and will retain system revenues.

The negative fare impacts are on a relatively small number of existing passengers (about 400 per weekday), approximately half of whom use the park and ride facility to take advantage of the low rail fare, which is an anomaly in the current system.

Option	Simplicity	Equity	Impact on existing customers	Impact on travel behaviour	Revenue impacts
1. Current proposal (Orakei in Isthmus Zone)					
2. Orakei station in City Zone	<b>XX</b>	<b>X</b>	<b>+</b>	<b>X</b>	<b>X</b>
3. Shift City Zone boundary east	<b>X</b>	<b>X</b>	<b>++</b>	<b>X</b>	<b>XX</b>
4. Orakei Station as a zone overlap	<b>X</b>	<b>X</b>	<b>+</b>	<b>X</b>	<b>X</b>