# Customer Focus Committee v2.2 9<sup>th</sup> October 2014

# **PT Integrated Fares**

- CFC objectives
- Recap and further progress
- Project delivery options & recommendations
- Zonal fare modelling, passenger impacts & recommendations
- Summary & Next steps



### **CFC** Objectives

- 1. Recall the purposes of integrated fares being simplicity, legibility and transparency of PT fares for customers; remove trip transfer financial penalty prior to the increasing of transfers with the bus New Network implementation (start end-2015); realise patronage growth potential of the connected bus New Network
- 2. Note the new customer value proposition offered by integrated fares of a 2 hour single journey of up to three separate trips, compared to existing single journey of a single trip opening origin and destination options under the New Network
- 3. Endorse recommended alternate project delivery approach minimum ticketing system redevelopment to utilise existing functionality and reduce development and implementation cost from \$16m to \$7m; avoid 'big-bang' implementation and implementation by Nov-2015
- 4. As a result of reduced development, endorse recommended alternate zonal structure 5 neighbourhood zones radial to CBD compared to previous recommended 5 concentric circle zones radial to CBD
- 5. Note the positive BC for zonal integrated fares and the positive patronage growth that would result; with some risk of short-term churn from fare changes
- 6. Note the inevitable fare changes that result from a shift from 8 stage granular to 5 zone less granular with two recommended pricing options (revenue retention at \$0 subsidy increase and patronage retention at \$2.75m subsidy increase to reduce HOP losers and grow patronage by 2 million); with recommended mitigation to minimise HOP fare increases through a March 2015 annual PT fare review migration step through implementation of RPTP policy of on average fare change ~ equivalent to NZTA indexation level
- 7. Endorse submission to the October Board





# **Recap and further progress**

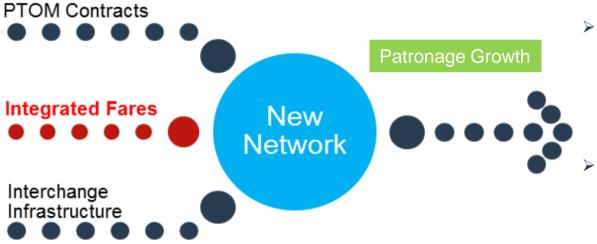
- 1. April 2014
  - Board endorsed shift from non-transparent 8 stage single trip journey existing fare structure to more legible but less granular 5 zone concentric ring zones with a 2 hour single journey concept with weekly fare caps
  - Board sought options to minimise HOP fare increases
- 2. July 2014
  - Confirmed development cost of \$16 million with a high risk "big bang" approach
- 3. Since July the following progress:
  - Detailed review to utilise current ticketing capabilities with limited development and reduced cost
  - Modelling updated to analyse zonal structure and fare price points
  - Confirmed a Business Case for integrated fares





### Integrated fares – reminder of business drivers

- 1. 1<sup>st</sup> phase was Ticketing Integration with AIFS, 2<sup>nd</sup> phase Fares Integration: realises full benefit in ticketing system investment
- 2. Integral part of fully integrated PT network capable of delivering a transformational shift as it enables transfers for passengers without any financial penalty



- Stand-alone integration effect on patronage: international evidence approx. +3% prior to any price change effects
- New Network assumed transfer rates increase from current 8% to 15%
- 3. Simple and intuitive fares consistent with RPTP objectives
- Supports long-distance PT travel critical with Auckland's wide geographic spread and outer area growth plans under the Unitary Plan





### **Options evaluation**

#### **OPTION 1**

No ticketing system development

- Utilise current single transfer discount
- No Thales development required
- Some incorrect fare results depending on where transfer occurs
- Approximately \$4m cost, delivery mid-2015

#### **OPTION 3 is recommended:**

#### **OPTION 2**

Full ticketing system redevelopment (<u>previous</u> <u>proposal</u>)

- Concentric circle zones structure
- No transfer discount concept true integrated fares calculation
- Transition risk "big bang' deployment
- Approximately \$16m cost, delivery mid 2016

#### **OPTION 3**

Limited ticketing system development (<u>lower</u> <u>development cost proposal</u>)

- Neighbourhood zones structure
- Utilise existing transfer discount functionality to ensure correct fare charged for multi-leg journeys
- Approximately \$7m cost, delivery 4Q 2015
- Delivers majority of benefits of 5 zone concentric circle integrated fares but with neighbourhood zones to reduce development cost by \$9m
- Uses existing fare calculation methodology of (a) crossing zone boundary; plus (b) existing transfer discount functionality - to calculate multi-leg journey fare rather than point-to-point multi-leg fares to reduce development cost by \$9m
- Reduces "big bang" transition risk; end-2015 delivery enables bus New Network
- Cost within planned budget for 14/15 and 15/16 fiscal years





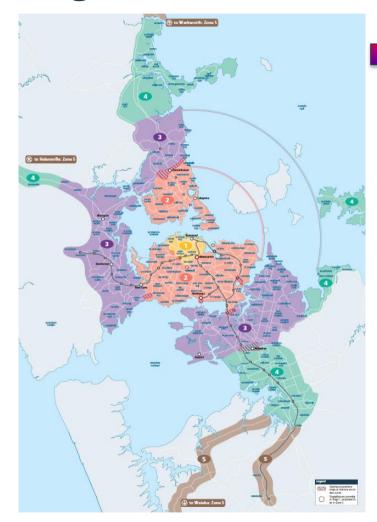
### **Previous Option 2 vs. recommended Option 3**

	<b>Previous preferred Option 2</b> Full ticketing system redevelopment \$16m	Recommended Option 3 Transfer discount enhancement \$7m	
Zonal structure	Concentric zones radiating out from City Centre	Neighbourhood zones radiating out from City Centre (each zone separate)	
Zonal fares	5 zonal fares to CBD 5 zone journey cap	5 zonal fares to CBD No capped journey fare	
Fare calculation	By ring travelled in once	By zones travelled through	
Journey concept	3 legs, 2 hours No penalty for transfers	3 legs, 2 hours No penalty for transfers	
High user products	Weekly caps	Weekly pass, Monthly pass Daily Cap	
Ferry services	No change to Ferry Fares at launch	No change to Ferry Fares at launch	
Fare impact on passengers	No difference between 2 options. Will depend on final zonal boundaries and price points		





# Option 2 concentric zones to recommended Option 3 neighbourhood zones



#### FROM

5 rings to CBD Concentric Numbered zones 5 zones to CBD Neighbourhood Named zones

#### **NO CHANGE**

ТО

Zone boundaries Zone size Cross-zonal travel Radial travel Overlapping zones Pricing (subject to pricing points)

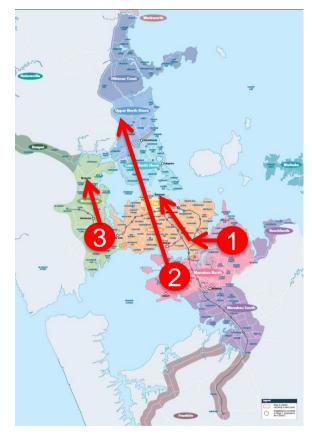
> Actually preferred by June focus groups as simpler as pay once each time enter a zone



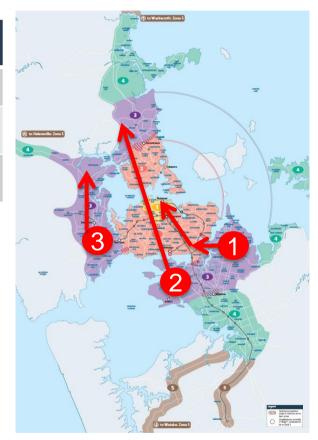
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# Disbenefit: pay for every zone passed through ... ... but focus groups thought this was a simpler message



Journey	Option 2: Concentric	Option 3: Neighbourhood
1. Radial	3 zone fare	3 zone fare
2. Cross region via city	3 zone fare	5 zone fare
3. Cross zone	1 zone fare	1 zone fare



#### **Option 3: Neighbourhood**

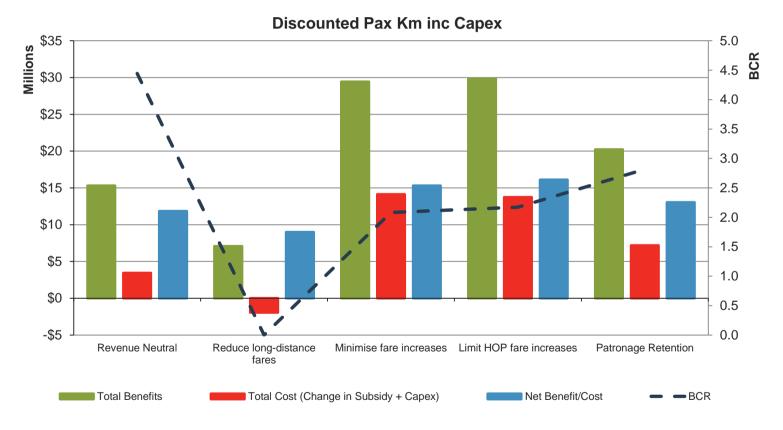


**Option 2: Concentric** 



### Integrated fares demonstrated +ve Benefit Cost

Of the 5 pricing scenarios modelled, all have a BCR over 1 except for "Reduce Long-distance fares". The best performing is the Revenue Neutral with Patronage Retention the next preferred.





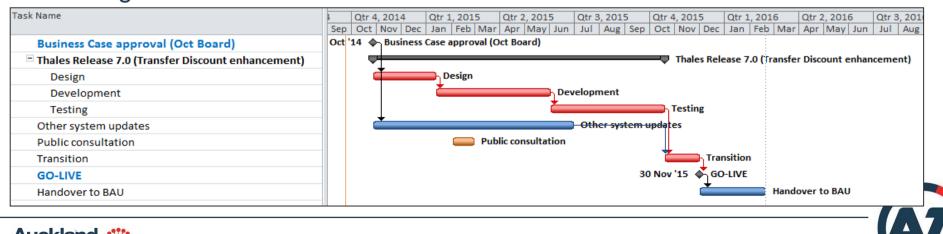


# **Option 3 budget & timelines**

#### \$7m proposed development and implementation budget:

Description	14/15 fiscal	15/16 fiscal	total
Thales costs	\$1,500,000	\$1,000,000	\$2,500,000
Other system development	\$500,000	\$250,000	\$750,000
Project resource costs	\$1,250,000	\$1,350,000	\$2,600,000
Transition costs	\$300,000	\$700,000	\$1,000,000
TOTAL BUDGET	\$3,550,000	\$3,275,000	\$6,850,000
Capex budget	\$3,000,000	\$2,350,000	\$5,350,000
Opex budget	\$550,000	\$950,000	\$1,500,000

#### Nov-2015 go-live:





# **5 modelled pricing scenarios**

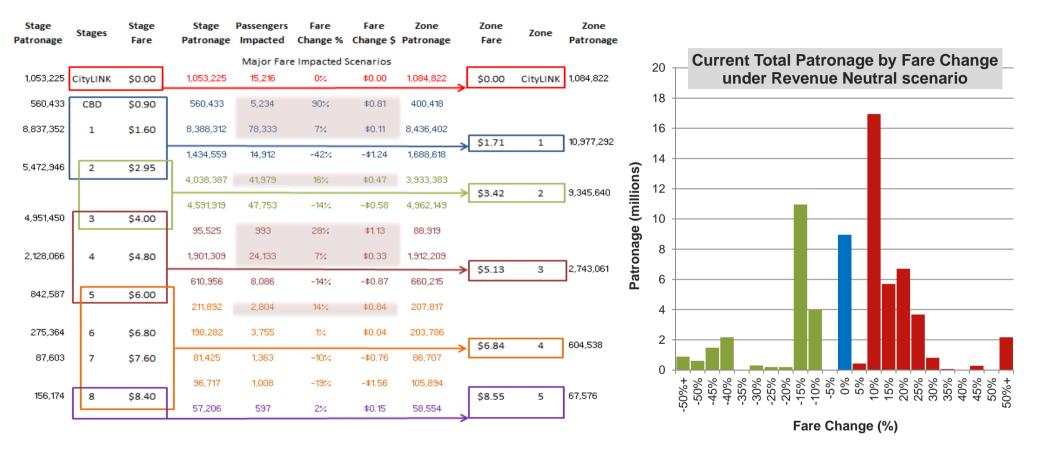






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#### Fare transition (Scenario 1: Revenue neutral) Adult HOP fares

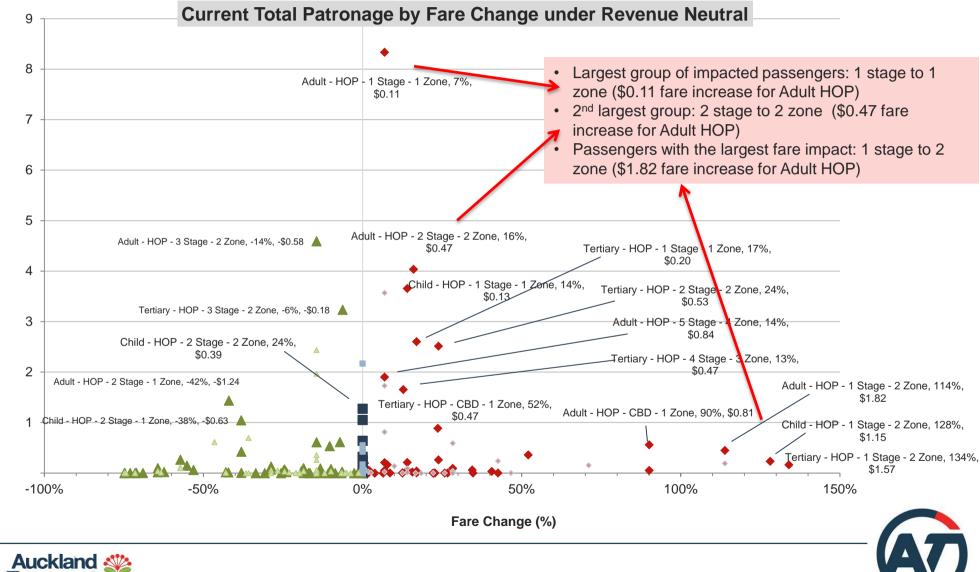


- Largest group of impacted passengers: 1 stage to 1 zone (\$0.11 fare increase for Adult HOP)
- 2nd largest group: 2 stage to 2 zone (\$0.47 fare increase for Adult HOP)
- Passengers with the largest fare impact: 1 stage to 2 zone (\$1.82 fare increase for Adult HOP)





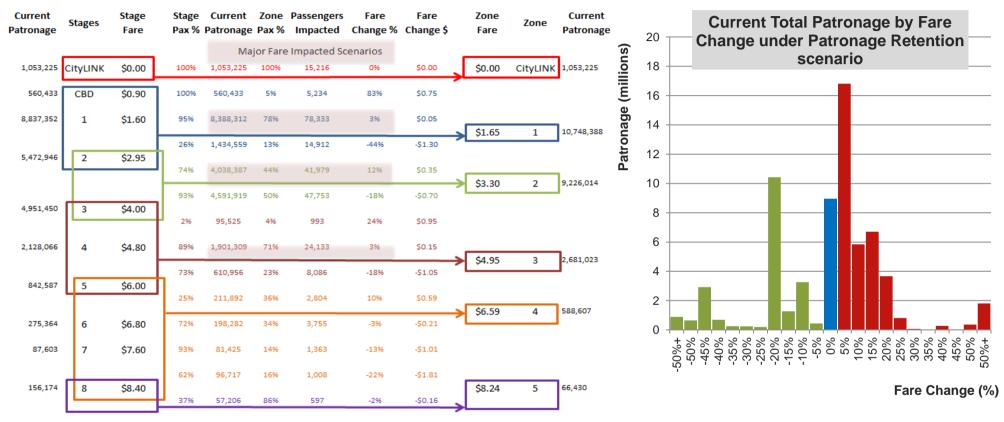
#### Fare transition (Scenario 1: Revenue neutral) All fares



Auckland Council Organisation

Patronage (Millions)

#### Fare transition (Scenario 5: Patronage Retention) Adult HOP fares



- By investing \$2.75m p.a. we can reduce the price of the zone 1 fare from \$1.71 to \$1.65 reducing the impact on 1 stage to 1 zone from \$0.11 fare increase to \$0.05 for Adult HOP
- Other passenger impacts are also reduced by around 5% but total number of impacted passengers is not reduced (just the level of impact)



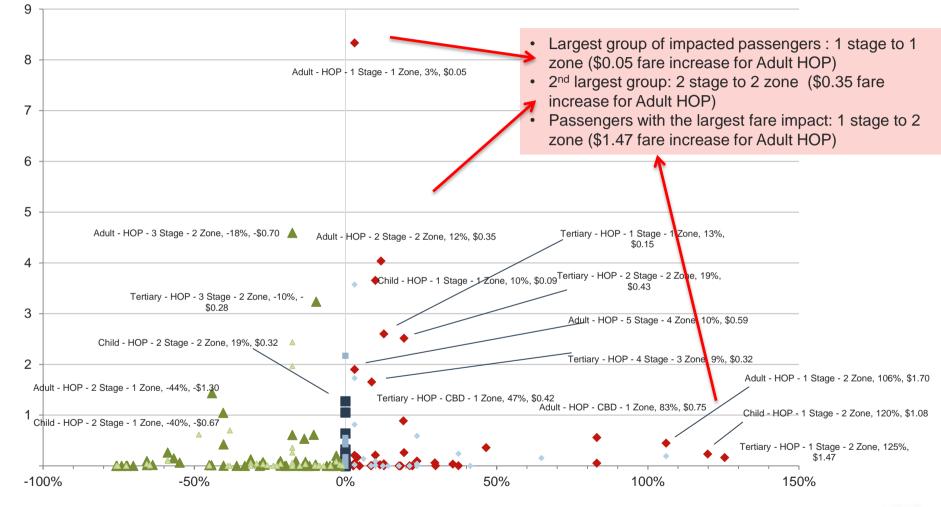


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### Fare transition (Scenario 5: Patronage Retention)

All fares

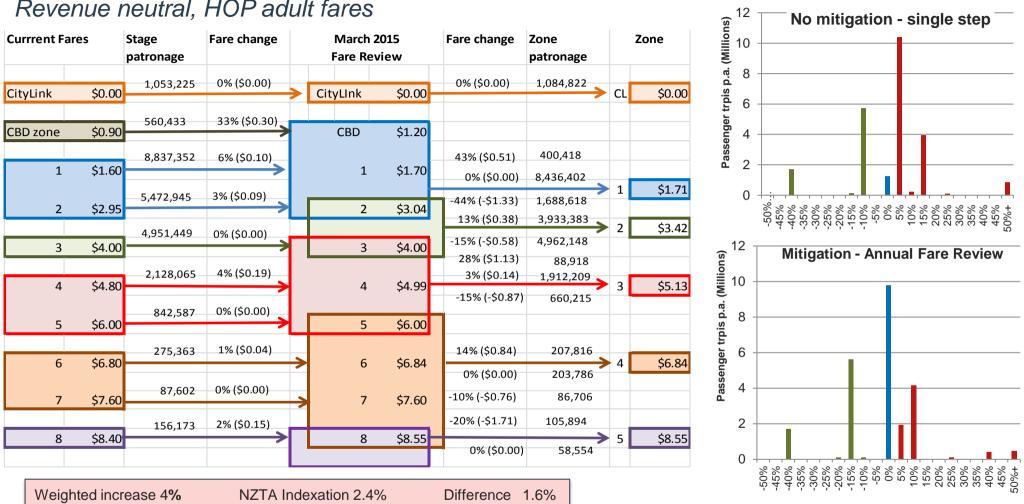
Current Total Patronage by Fare Change under Patronage Retention scenario





Patronage (Millions)

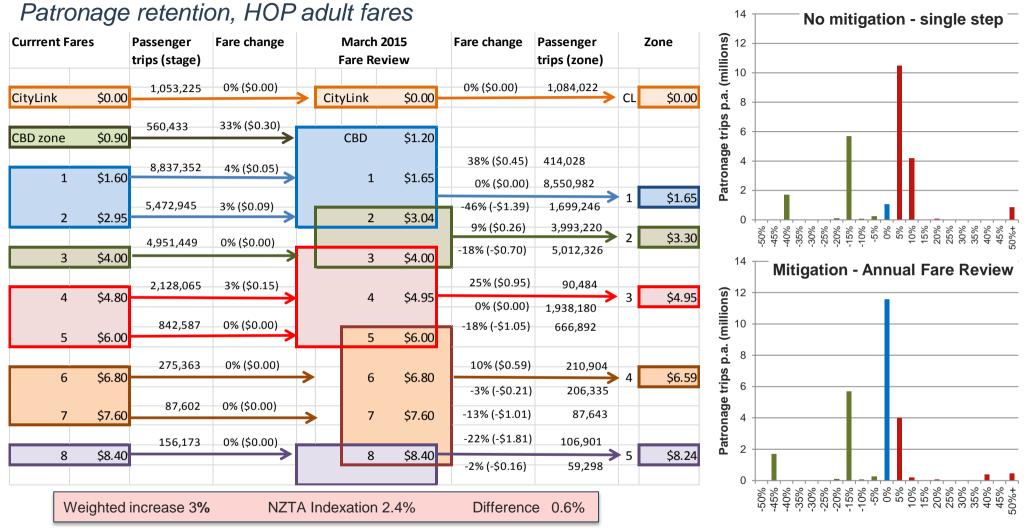




Mitigation for HOP increases: staged transition – use March 2015 annual fare review <sup>16</sup> Revenue neutral, HOP adult fares  $2^{12}$  No mitigation - single step

- We have the opportunity to phase price changes in the next annual fare review in March 2015 where we apply increases as per the NZTA indexation and guidelines in the RPTP
- Through indicative annual review prices the largest group of impacted passengers are mitigated





Mitigation for HOP increases: staged transition – use March 2015 annual fare review <sup>17</sup>

 As per revenue neutral, the annual fare review will move the largest group of impacted passengers to fare neutral and very few passengers with more than a 5% increase





# **Zonal fare impact conclusions**

- By moving from 8 stages to simpler more transparent 5 zonal fares some passenger impact is unavoidable
  - The largest group of impacted passengers are 1 stage to 1 zone
  - This can be mitigated under both Revenue Neutral or Patronage Retention at the March 2015 Annual Fare Review applying Annual Fare Review guidelines in the RPTP for an increase of approximately the NZTA indexation level

This will allow us to launch Integrated Fares with a very positive fare "story" – small number of passengers will experience increases, many passengers will experience fare decreases with no penalty for transfers





# Summary & next steps

- Integrated Fares has a positive BCR for 4 of the 5 modelled scenarios
- The project can be delivered within the current approved capital budget
- Without integrated fares we cannot realise the full benefit of the New Network and we will penalise passengers for transferring as part of their journey
- Recommend proceeding with the enhanced current technical solution
- Recommend proceeding based on either Revenue Neutral (no additional investment required) or Patronage Retention (\$2.75m additional investment in year 1)
  - We can report back to the Board at key intervals throughout the Project on final zonal boundaries and any modelling updates
- Finalise Business Case and supporting Board Paper & submit to the October Board for review and approval
- March 2015 Annual PT Fare Review using RPTP policy of fare change aligned ~ to NZTA indexation levels can be used to mitigate fare increases in Nov 2015



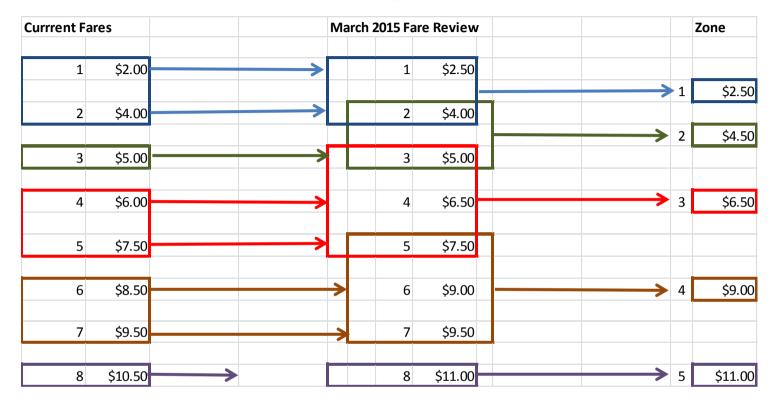


# **Additional slides**





# Mitigation for fare increases: staged transition – use March 2015 annual fare review <sup>21</sup> both Revenue Neutral and Patronage Retention, Cash

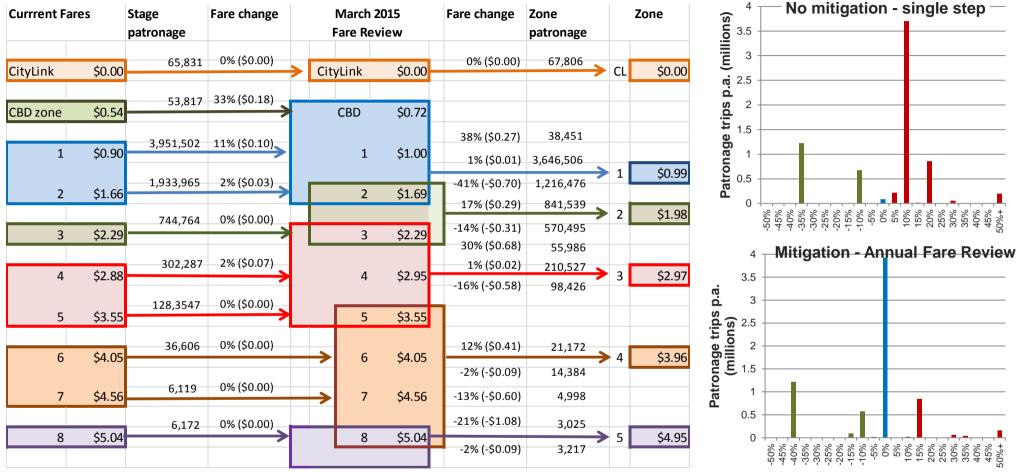


• We can step towards the planned cash fares with \$0.50 increases to 1 Stage, 4 Stage, 6 Stage and 8 Stage fares. Other fares will be unaffected.





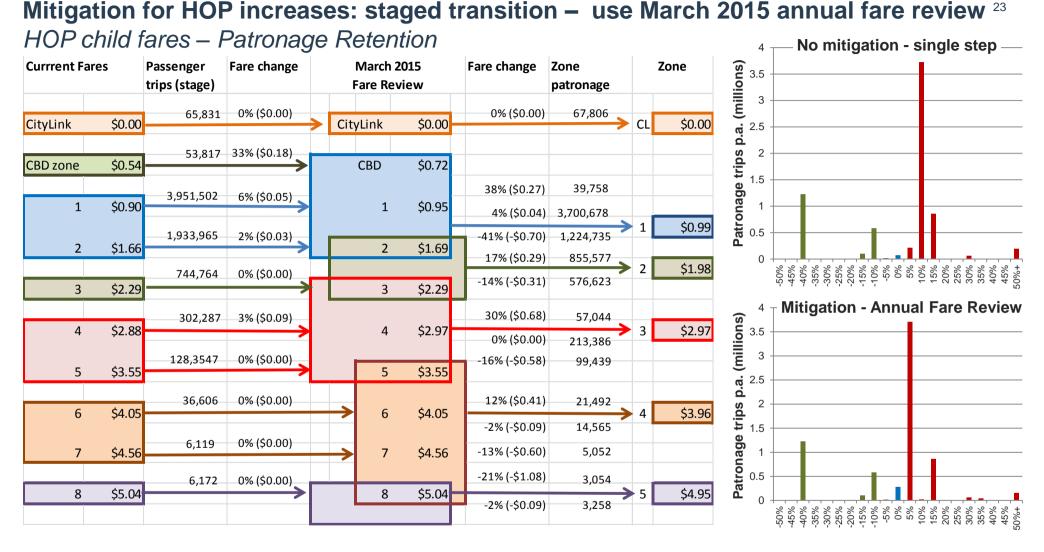
#### Mitigation for HOP increases: staged transition – use March 2015 annual fare review <sup>22</sup> HOP child fares – Revenue Neutral



 For Children we would increase the CBD zone, 1 stage, 2 stage and 4 stage fares. Other stages would be unchanged at the Annual Fare review.



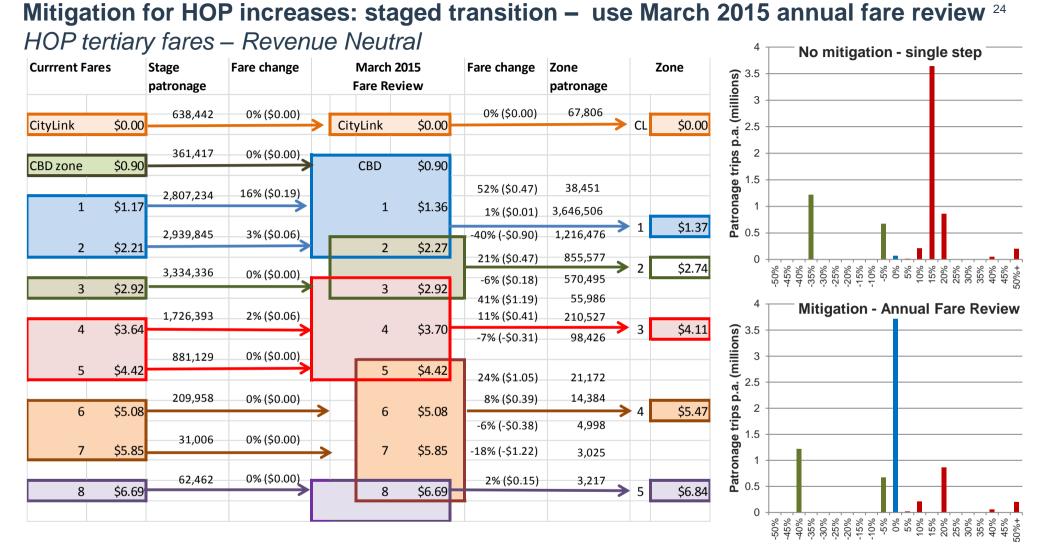




 For Children we would increase the CBD zone, 1 stage, 2 stage and 4 stage fares. Other stages would be unchanged at the Annual Fare review.



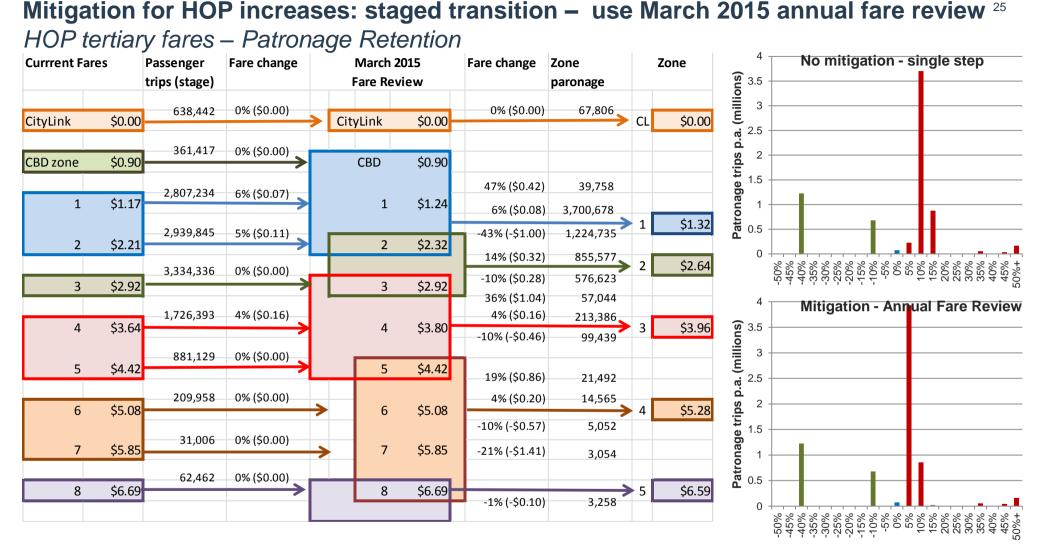




• For Tertiary we would increase the 1 stage, 2 stage and 4 stage fares. Other stages would be unchanged at the Annual Fare review.







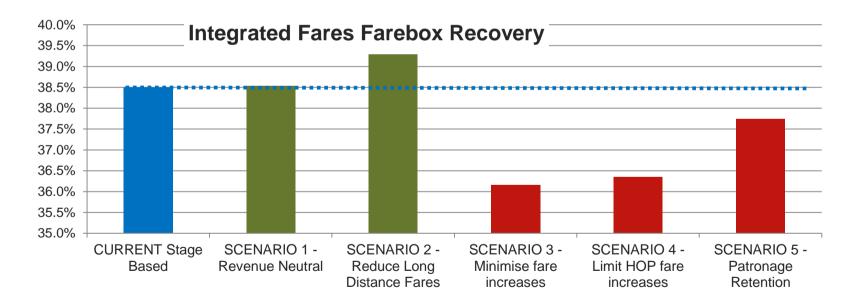
 For Tertiary we would increase the 1 stage, 2 stage and 4 stage fares. Other stages would be unchanged at the Annual Fare review.





# **Farebox recovery implications**

- See below the farebox recovery implications for all 5 modelled scenarios
- Note that this reflects only Bus and Rail farebox, and excludes supergold, CFD and Ferry
- Scenario 1 (revenue neutral) maintains current farebox recovery, scenario 2 improves farebox recovery, while scenarios 3, 4 and 5 all reduce farebox recovery widening the gap from the NZTA target

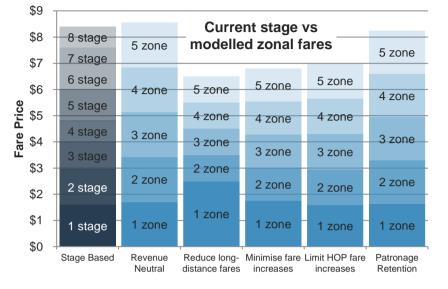




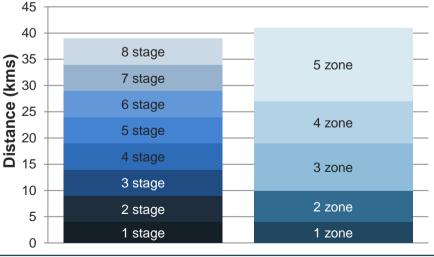


### A reminder of why we are moving to integrated zonal fares

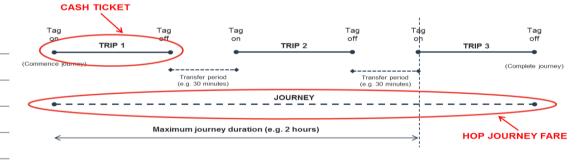
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Distance to boundary - Stage vs zonal For Trip from City to South Auckland



- Zonal fares are simpler and more transparent
  - but 8 stages to 5 zonal fares makes some fare impact unavoidable without major revenue loss
- "Single journey" was a single trip and will be a 2 hour journey of up to 3 legs with no penalty for transfer
  - New Network creates a connected network
  - More journey options that require transfer





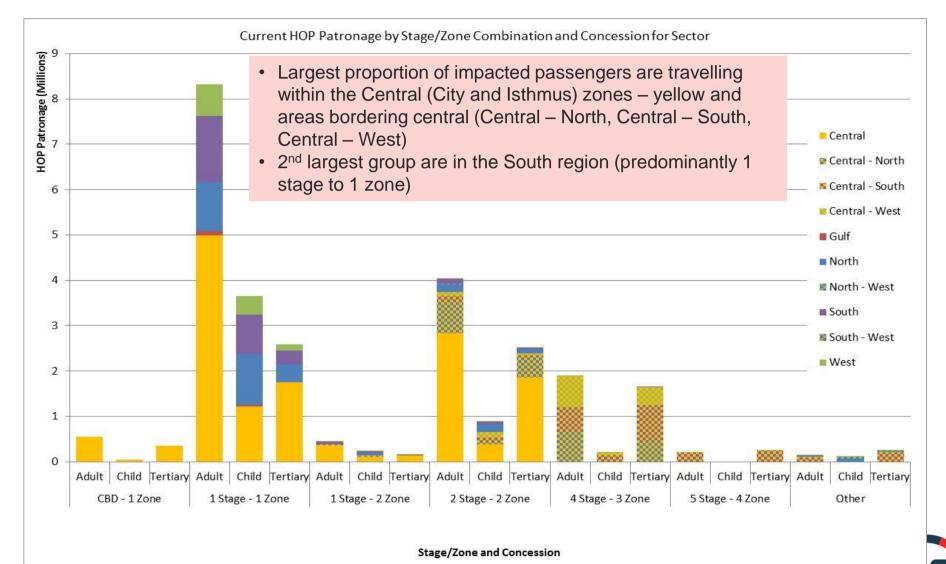
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#### Zonal fare increases by stage-zone and location

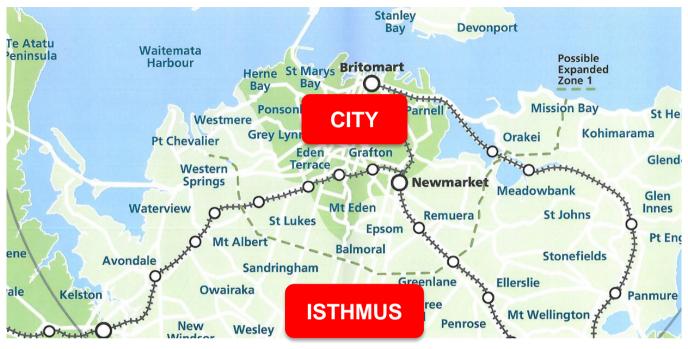
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Both Patronage Neutral & Patronage Retention (all passenger types)





# Fare impact mitigation – expanded city zone



 The city zone boundary is based on the current 1 stage boundary

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- A new boundary would follow more logical geographic boundaries (St Lukes Rd, Balmoral Rd, etc) and would be simpler to communicate
- Enhanced value proposition for a 1 zone fare
- We have modelled the impact this enlargement would have on revenues, patronage and passenger impact. Key conclusions were:
  - AT would lose around \$1m p.a. in revenue unless we increased fares by \$0.02 to compensate
  - 2% patronage converted from fare increase to fare decrease (approximately 750,000 passenger trips pa)



