Integrated Fares

(Note, yellow highlights are changes to the previously uploaded paper resulting from feedback from the 20 April CFC meeting.)

Recommendation(s)

That the board:

- i. Receives the report
- ii. Notes that additional external AT Metro funding to minimise HOP fare increases from the transition to integrated fares has not been forthcoming, resulting in a feasible pricing Scenario 1 'revenue neutral' (previous scenario A from October 2014 Board) with two additional pricing scenarios under consideration to achieve a Scenario 2 'minority HOP fare increases' and Scenario 3 'minimal HOP fare increases'. Final approval of the preferred pricing scenario and fare prices will be sought from the Board later in 2015, considering feedback from public consultation, and confirmed three year LTP/NLTF AT Metro funding plus identification of other opex reductions, including potential reduction in low patronised PT services, to cover unbudgeted revenue reductions and increased passenger capacity costs under the alternative scenarios.
- iii. Approves the product development roadmap including:
 - a. Stored Value from single leg/trip single fare (with 50c transfer discount) stage based to single journey concept comprising 2-hour travel across up to 3 legs
 - b. Simplified Day and Monthly passes with single all-zone month pass for bus/train and three consistent inner, mid and outer harbour ferry passes
 - c. Simplified day pass with single all-zone day pass (includes inner harbour ferries)
 - d. Review a transition from Day and Monthly passes to fare caps after stabilisation of integrated fares
- iv. Approves targeted public consultation on indicative fares and structure in May via the RPTP variation process including:
 - a. Proposed geographic zones and boundaries
 - b. Indicative range of pricing levels to accommodate pricing scenarios 1 to 3.
 - c. Product transition roadmap
- v. Notes proposed go-live of integrated fares to April 2016
- vi. Notes an increase in the integrated fares budget from \$6.85M to \$8M.

Executive summary

Further to the Board approval in October 2014 of the business case and fare structure concept for AT Metro integrated fares, further work has been completed to:

- (a) identify indicative pricing scenarios
- (b) confirm the proposal for the AT Metro ticket product roadmap





- (c) confirm project timeline and budget with confirmed Thales development activities
- (d) with an improved technical development solution by Thales.

Attachment 1 provides an update to the Customer Focus Committee presentation of 20 April 2015 to accommodate feedback provided at that meeting.

There are three indicative price scenario's in this paper detailed on slides 9 to 13 at Attachment 1 which achieve improving fare outcomes for customers:

- Scenario 1 'revenue neutral' based on no additional specific external funding beig forthcoming: 43% HOP fare user price reduction or no change; +\$2.4M per annum scheme revenue increase; \$3.9M per annum capacity increase (budgeted) for +1.7M passenger boardings per annum; zero unbudgeted impact on AT; +0.2% farebox recovery
- Scenario 2 'minority HOP fare increases': 71% HOP fare user price reduction or no change; +\$1.8M per annum scheme revenue increase; \$4.2M per annum capacity increase (\$4.0M budgeted) for +2M passenger boardings per annum; -\$0.5M (unbudgeted) to +\$1.5M (favourable) per annum AT budget impact; 0% farebox recovery impact
- Scenario 3 'minimising HOP fare increases': 96% HOP fare user price reduction or no change; -\$1.5M per annum scheme revenue decrease; \$5.3M per annum capacity increase (\$4.0M budgeted) for +2.7M passenger boardings per annum; -\$2.9M (unbudgeted) to +\$3.4M (unbudgeted) per annum AT budget impact; -1% farebox recovery impact

All the above scenarios see significant cash fare increases and increasing the HOP to cash differential from at least 20% to at least 33%. All scenarios see the residual 4% of HOP passengers with a fare increase as a result of the removal of micro-zone fares (CBD and airport), removal of anomalies between bus and train fare stages (eg Orakei station) and some zone boundaries differing from current stage boundaries.

AT is still confirming with Council and Transport Agency partners the three year AT Metro funding through the LTP and NLTF. Other opex funding will also need to be identified to fill funding gaps for Scenarios 2 and 3. With consideration of public consultation feedback, the final pricing scenario and pricing levels for integrated fares will be confirmed to the Board later in 2015, with a view to progressing as far as possible towards Scenario 3. In parallel, confirmation of Scenario 3 BCR above 1.0 will be required to complete the application to the Transport Agency for funding.

As part of the introduction of integrated fares, it is proposed to rationalise products, removing those that lack uptake and replacing them with simplified day and monthly pass zone options. A transition path is proposed to review the revenue and customer demand of integrated fares and period passes after introduction of integrated fares when the AT Metro customer and revenue base beds-in to assess the benefits and impacts of a transition from period passes to fare caps. This substantially de-risks the revenue exposure to AT after the go-live of integrated fares during the next two years.

The proposal is to implement a substantially simplified HOP product suite alongside the revised HOP stored value 2-hour 3-leg journey single fare and cash single trip offering:

(a) Single all-zone day pass that includes inner harbour ferries





- (b) Single all-zone monthly pass
- (c) 3 ferry monthly passes inner harbour, mid harbour and outer harbour, subject to confirmation of technical solution and commercial negotiation with ferry operators.

Based on the Thales confirmed development schedule of the ticketing solution, the planned go-live date is April 2016. Following confirmation of Thales development costs for the back-office apportionment solution and higher planned public communications costs the project budget will need to increase by \$1.15M to \$8M.

It is proposed that targeted public consultation occur in May 2015 based on the current modelled zone pricing ranges and products outlined in this paper via the RPTP variation consultation proposed for May.

Strategic context

The Regional Public Transport Plan (RPTP) is in the process of being varied to reflect amongst other updates, the move to integrated fares. It will set out key fares policy, the 2-hour 3-leg journey concept for AT HOP single fares and product offering, and the proposed zone map. There will be consultation for the RPTP and targeted integrated fares consultation will be aligned.

Integrated Fares remains a key element for successful implementation of the AT Metro New Network to allow passengers to transfer without financial penalty and to provide a simpler, more intuitive fare structure to support aggressive patronage growth targets for Auckland. Introduction of a zonal fare structure will bring Auckland in line with many leading international cities and provide a platform for future growth of public transport.

The proposal is aligned to the AT strategic themes to prioritise rapid, high frequency public transport and transform and elevate customer focus and resilience through offering a more intuitive and simpler fare structure.

Pricing scenarios requiring additional opex cannot be confirmed until three year LTP/NLTF AT Metro funding is confirmed over the coming two months and other potential opex and service reductions are identified to cover unbudgeted revenue reductions and service capacity cost increases.

Background

In October 2014 the Board resolved:

- Adoption of the business case.
- Approved a 2-hour single journey HOP fare (up to 3 individual trips) across bus and rail
 with daily caps, weekly caps or passes and introduction of neighbourhood fare zones
- Approved a preferred pricing strategy of 'limit HOP fare increases' subject to identification of the additional opex funding required
- Noted acceptance of two alternate pricing scenarios ('patronage retention' and 'revenue neutral') based on the level of additional opex funding availability.
- Approved release of integrated fares information for public consultation
- Noted that detailed pricing will be brought back to the Board prior to implementation
- Approved commencement of development of integrated fares to achieve implementation by November 2015.





Progress since the October 2014 Board meeting is detailed in the updated (following feedback from the 20 April 2015 meeting) Customer Focus Committee presentation provided at Attachment 1, with the key points of change or confirmation highlighted below.

Issues and Options

Fare zones

The fare zone map previously presented has been refined with Auckland divided into geographic zones radiating out from the central city which are separately labelled and coloured (Attachment 2). This includes refinements which reflect feedback from focus groups held in mid-2014. The map will be core in helping Aucklanders understand the zonal fare structure and will be a key focus during the planned public consultation.

Product suite: bus and train

The bus/train ticket product suite is illustrated at slide 6 in Attachment 1. In summary:

- (a) A 2-hour journey of up to 3-legs for AT HOP single fare paying for zones passed through (only once per zone) as illustrated at slides 7 and 8 at Attachment 1
- (b) Cash fares limited to single leg journeys as illustrated at slide 8 at Attachment 1
- (c) A preferred option of a family weekender pass (2 kids free with a fare paying adult)
- (d) A whole region single bus/train/inner harbour ferry day pass of \$18
- (e) A whole region single bus/tain monthly pass of \$205
- (f) Potential migration from above day and monthly passes to fare caps based on modelling post implementation of integrated fares when revenue and customer behaviour change can be accurately modelled following bedding in of the integrated fares proposal.

Slides 14 and 15 at Attachment 1 provide further rationale for the simplification of existing day and monthly passes and the future transition potential from period passes to fares caps when revenue and customer behaviour change risk can be accurately assessed after the broader change to integrated fares.

Fares pricing

The integrated fares model has been updated quarterly (currently to December 2014) with the latest HOP data to ensure modelled outcomes closely match passenger behaviour. In development of the indicative fares the following three key principles have been followed:

- (a) Minimise impacted passengers minimise the number of passengers with fare increases (particularly HOP passengers)
- (b) Minimise extent where there are increases, minimise extent of increase
- (c) Promote longer distance PT use ensure longer distance travel is cheaper as this delivers the highest economic benefit (increased passenger kms)

The following fare rules have been applied which will form part of key public messages:

- (a) Adult HOP single fare customers receive at least 33% discount off cash journeys with a single leg and more on multi-leg journeys
- (b) Child and accessible fares are at least 40% cheaper than the equivalent adult fare
- (c) Tertiary HOP fares are at least 20% cheaper than Adult HOP fares





- (d) All zone HOP bus and train monthly pass available for frequent and multiple zone travellers offering discount over single journey fares with a single whole of region product
- (e) Ferry fares remain as origin and destination and not integrated with bus and train travel

Proposed single journey pricing across the three pricing scenarios is detailed at slides 11 to 13 of Attachment 1. In summary the 3 pricing scenario proposals achieve:

Outcome	Scenario 1 – 'revenue neutral'	Scenario 2 – 'minority HOP fare increases'	Scenario 3 – 'minimise HOP fare increases'
Patronage year one	+1.7M (+2.5%)	+2.0M (+2.9%)	+2.7M(+4.0%)
Scheme revenue (majority flows to operators) year one	+\$2.4M (+1.7%)	+\$1.8M (+1.3%)	-\$1.5M (-1.1%)
AT revenue	+\$325K	+\$202K	-\$1.1M
 Operator positive impact 	+\$2.4M	+\$2.0M	+\$444K
 Operator negative impact 	-\$321K	-\$417K	-\$883K
OPEX for service capacity increases to meet patronage gains year one	-\$3.9M	-\$4.2M	-\$5.3M
Fare Box Recovery	+ 0.2%	+0.0%	- 1.0%
Passenger KMs	+4.2%	+4.5%	+5.8%
AT budget gap range*	\$0 to +\$2.4M	-\$500K to +\$1.5M	-\$2.9M to -\$3.4M
% of HOP passengers with a fare increase	<mark>57%</mark>	<mark>29%</mark>	<mark>4%</mark>

*lower end range = negative impacted operators seeking AT compensation, but AT must negotiate anuy positive operator gain

The proposed fares achieve these outcomes by generally increasing the cash fares for equivalent stage based journeys whilst a lower impact for the HOP fare for equivalent stage based journeys as illustrated by the graph for scenario 1 on slide 34 at Attachment 1.

Slides 35 to 40 detail the impact on individual customer groups by pricing Scenario 1. Slide 9 at Attachment 1 summarised below identifies progressive improvements for HOP customers from Scenario 1 to 3:





Pricing cooperio 1		Impact	No	% of total	avg incr
Pricing scenario 1	0	Fare Increase	28.0M	57%	10.4%
Biggest HOP negative impacts:	P.	No Change	6.2M	13%	0.0%
 13.8M passengers with <10c 		Fare Decrease	14.6M	30%	-22.4%
increase		Impact	No.	% of total	avg incr
• 900K CBD zone + 1.1M zone	£	Fare Increase	11.9M	58%	32.5%
boundary anomalies	Cash	No Change	6.0M	30%	0.0%
 major stages versus equivalent zone 		Fare Decrease	2.5M	12%	-21.1%
prices increases 12.3M.					
Pricing scenario 2		Impact	No	% of total	avg incr
HOP <10c increases in Scenario 1	HOP	Fare Increase	14.2M	29%	14.7%
removed, through price reductions on	H	No Change	20.0M	41%	0.0%
key zones		Fare Decrease	14.6M	30%	-23.2%
		Impact	No	% of total	avg incr
	Cash	Fare Increase	11.9M	58%	32.5%
	ర	No Change	6.0M	30%	0.0%
		Fare Decrease	2.5M	12%	-21.1%
Pricing Scenario 3		Impact	No	% of total	avg incr
	НОР	Fare Increase	2.0M	4%	42.5%
 Matching zone pricing to major equivalent stages. 		No Change	30.3M	62%	0.0%
- 		Fare Decrease	16.6M	34%	-25.2%
		Impact	No	% of total	avg incr
	Cash	Fare Increase	11.9M	58%	32.5%
		No Change	6.0M	30%	0.0%
		Fare Decrease	2.5M	12%	-21.1%

Funding of pricing scenario's

Pricing scenario 1 (slide 11 at Attachment 1) provides for a revenue neutral position for AT which with successful negotiation with operators of net price contract and commercial services could improve to a net positive impact of upto \$2.4M, resulting in no negative AT budget impact other than budget available for capacity increases.

Pricing Scenario 2 (slide 12 at Attachment 1) provides for a range of a \$500K negative position to AT which with successful negotiation with operators of net price contract and commercial services could improve to a net positive impact of upto \$1.5M. This range of budget impacts should be manageable.

Pricing Scenario 3 (slide 13 at Attachment 1) provides for a range of a -\$3.4M negative position to AT which with successful negotiation with operators of net price contract and commercial services could improve to a net negative impact of -\$2.9M.

AT is operating in a constrained funding environment. Since the development of the LTP new funding pressures have emerged within AT Metro and across the wider AT organisation which currently require savings to be identified.

 The Transport Agency as funding and policy partner has indicated that NLTF funding available for AT Metro services will be lower than what was assumed in developing the LTP. AT is currently working through these projected subsidy levels with the





Agency. However, initial additional opex reductions may need to be identified and will be known by June.

Other AT projects have signalled a requirement for more opex budget in the 2015/16 financial year than was allocated in the LTP. This will be finalised by June.

Currently, any possible opex reductions that may be identified will need to be utilised to help close the LTP funding gap before considering integrated fares pricing scenarios.

If a decision is made to proceed with an Integrated Fares scenario that is not revenue neutral (pricing Scenarios 2 or 3) then the only feasible way this could be funded is through:

- Reducing some existing low patronised PT services
- Negotiating a revenue clawback on net price contracted and commercial services with operators
- Identify other opex and service reductions.

Since sufficient opex funds internally for pricing Scenario 3 have not yet been identified final confirmation of pricing levels will be confirmed to the Board later in 2015.

Scenario 3 results in a worsening of the fare box recovery ratio by 1% which would require above CPI increases in fares and or an extension of the timeframe to meet NZTA fare box recovery targets.

Another factor is the need to meet criteria for Transport Agency co-investment. At present this initiative has a benefit-cost ratio (BCR) of 1.9, making it High, High, Low using the Transport Agency's assessment criteria. At this level they will still co-invest but will not do so if the BCR falls below 1.0. The current ratio is based on a capital cost of approx. \$7 million and a revenue-neutral option for on-going cost. The changes proposed in Scenario 3 are likely to still keep the project above a cut-off BCR of 1.0. Modelling required to complete the application to the Transport Agency will confirm this. Should the project look likely to drop below a BCR of 1.0 we will need to reconsider fare revenue and this will also be considered in the subsequent report-back.

Ferry products

The zonal fare structure outlined above will not apply to ferries, at least in the initial stages. Including ferries in the full zonal system would be expensive, as current ferry fares are higher than comparable bus and train fares. Furthermore, the integration of ferries is further complicated by exempt services – Devonport, Waiheke and Stanley Bay, which are outside of AT's contractual control. The existing point-to-point fares for ferry services will therefore continue to apply, pending further work on integrating them into the zonal structure.

However, investigations are underway to examine whether ferries could in part be incorporated into a zonal solution and journey concept, at least in part. The concept is:

- Ferry HOP fare is land based equivalent fare plus one zone, incorporating origin and destination land based PT travel.
- Grouped radiating distance based monthly passes (slide 20 at Attachment 1)
- Grouped radiating distance based cash prices

This approach requires further technical validation with Thales, and would require commercial negotiation with operators.

The product migration path for ferries is detailed on slide 19 of Attachment 1

Project schedule, budget and deployment risks





Due to enhancements needed to the apportionment and settlement aspects of the system, there are 2 separate releases need to be delivered for the launch of Integrated Fares:

#	Release	Delivery to AT	Comment
7.0	Customer zonal enhancements	November 2015	Combined release with other HOP enhancements. HOP enhancements should be deployed to production first (risk mitigation)
7.1	Apportionment / settlement updates	March 2016	Specific release for Integrated Fares Further testing required post delivery

Based on 4-6 weeks of final testing the planned go-live will be April 2016. However, this timing still supports planned go-live of the New Network in South Auckland which is scheduled for 2nd quarter of 2016 (May/June).

Budget

While the project has tracked below budget to date, the project requires an increase to the approved budget of \$1.15M to \$8M. The drivers behind the required increase are:

- An additional release from Thales to support key apportionment changes not only to support Integrated Fares, but also to support PTOM
- Additional project resource costs from go-live changing from November 2015 to April 2016
- Reporting enhancements to support both Integrated Fares and PTOM
- Increased cost estimates for both short term operator training, and contact centre support for the "big bang" go-live of Integrated Fares

Based on these additional costs, an updated the overall project budget is as follows:

Description	2014/15	2015/16	Total
Ticketing system (Thales)	\$800,000	\$2,500,000	\$3,300,000
Other system development	\$0	\$1,000,000	\$1,000,000
Project resource costs	\$500,000	\$1,500,000	\$2,000,000
Transition costs	\$0	\$1,700,000	\$1,700,000
TOTAL BUDGET	\$1,300,000	\$6,700,000	\$8,000,000
Capex budget	\$1,300,000	\$4,800,000	\$6,100,000
Opex budget	\$50,000	\$1,850,000	\$1,900,000

The capital budget is identified in the Base Network and Accelerated Capital Programme. Opex costs will be managed within the total AT Metro operational budget.

Deployment risks

As the project progresses a number of key deployment risks have been identified:

Risk	Comments





CRL preparatory works impact ability to test and deploy ticketing system changes	The schedule for preparatory works for City Centre changes is timed around the planned go-live for Integrated Fares. This could impact both test resource and test environment availability.
"Big bang" deployment	Due to the complete replacement of the current fare structure, a "big bang" deployment is unavoidable which brings significant risk to the project. Major preparation, robust testing, and development of a roll-back plan will be critical to ensure business continuity is maintained.
Thales delivery risk due to conflicting resource requirements from NZTTL developments	As NZTTL activity ramps up, there is significant risk that limited Thales resources may be impacted both locally, and in Hong Kong and France.

Focused public consultation

Key stakeholder consultation has been undertaken throughout the integrated fares project, including operators, NZTA, and Auckland Council. Information on integrated fares has also been included in a memorandum to stakeholders as part of the upcoming variation to the Regional Public Transport Plan (RPTP). Feedback from stakeholders on the proposals has generally been positive, although operators will want to see detail on the pricing structure to determine likely revenue impacts (slide 28 at Attachment 1).

In line with previous Board resolutions, a targeted public consultation phase is planned for May 2015. This will be aligned to the RPTP variation consultation.

To assist the public in understanding the impacts of the fare changes, it is proposed to issue the set of indicative prices highlighted in this report, but the consultation material will make it clear that they are indicative prices only, and subject to confirmation at a later stage.

Next steps

No.	Description	Timeline
1	Focused public consultation for Simplified Zone Fares	May 2015
2	Lock down Thales costs for release 7.1 (apportionment/settlement)	May 2015
3	Project update to AT Board	August 2015
4	Delivery by Thales of release 7 for commencement of AT testing	November 2015
5	Project update to AT Board (final pricing)	February 2016
6	Delivery by Thales of release 7.1 (apportionment/settlement)	March 2016
7	Public launch of Integrated Fares	April 2016

Attachments

Number	Description
1	CFC 20 April updated presentation following CFC feedback.
2	Proposed zonal map

Document ownership







Recommended by	
Approved for submission	

Glossary

Acronym	Description
AC	Auckland Council
AT	Auckland Transport
CPI	Consumer Price Index
LTP	Long Term Plan
NLTF	National Land Transport Fund
NZTA	New Zealand Transport Agency
PTOM	Public Transport Operating Model
RPTP	Regional Public Transport Plan





Attachment 2: Proposed zonal map





