

Proactive Release

This document is proactively released by Te Manatū Waka the Ministry of Transport alongside other Auckland Light Rail Business Case documents. It should be noted that the Auckland Light Rail project was cancelled and will not be progressing in any form. This cancellation occurred before the completion of the Detailed Business Case (of which this document forms a part). This document does not, therefore, represent government policy. This document must not be relied on in any way or treated as a finished product. A complete peer review process has not been undertaken of this document, and any analysis or conclusions contained in this document may contain errors and omissions. The Ministry accepts no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission. Some information has been withheld on the basis that it would not, if requested under the

Some information has been withheld on the basis that it would not, if requested under the Official Information Act 1982 (OIA), be released. Where that is the case, the relevant section of the OIA has been noted and no public interest has been identified that would outweigh the reasons for withholding it.

Listed below are the most commonly used grounds from the OIA.

<u>Section</u>	Description of ground
6(a)	as release would be likely to prejudice the security or defence of New
	Zealand or the international relations of the New Zealand Government
6(b)	as release would be likely to prejudice the entrusting of information to the
	Government of New Zealand on a basis of confidence by
	 the Government of any other country or any agency of such a Government; or
	(ii) any international organisation
6(c)	prejudice the maintenance of the law, including the prevention, investigation, and
3(3)	detection of offences, and the right to a fair trial
9(2)(a)	to protect the privacy of natural persons
9(2)(b)(ii)	to protect information where the making available of the information would be likely
0(2)(0)(11)	unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information
9(2)(ba)(i)	to protect information which is subject to an obligation of confidence or which any
- (-)()(-)	person has been or could be compelled to provide under the authority of any
	enactment, where the making available of the information would be likely to prejudice
	the supply of similar information, or information from the same source, and it is in the
	public
9(2)(ba)(ii)	to protect information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information would be likely otherwise
- (-) (n) (n)	to damage the public interest
9(2)(f)(ii)	to maintain the constitutional conventions for the time being which protect collective and individual ministerial responsibility
9(2)(f)(iv)	to maintain the constitutional conventions for the time being which protect the confidentiality of advice tendered by Ministers of the Crown and officials
9(2)(g)(i)	to maintain the effective conduct of public affairs through the free and frank expression of opinions by or between or to Ministers of the Crown or members of an organisation or officers and employees of any public service agency or organisation in the course of their duty
9(2)(h)	to maintain legal professional privilege
9(2)(i)	to enable a Minister of the Crown or any public service agency or
○(<u>~</u>)(i)	organisation holding the information to carry out, without prejudice or disadvantage, commercial activities
9(2)(j)	to enable a Minister of the Crown or any public service agency or organisation
3(Z)(J)	holding the information to carry on, without prejudice or disadvantage, negotiations



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[Drafting note: This is a 50% version of the Financial Case. It has been completed based on the information available at the time of drafting and agreed level of development with Auckland Light Rail Limited. This update builds upon the 30% Draft, particularly in relation to further development of the process, methodoolgy and costs / project scope.

The approach to addressing the financial impacts of the urban interventions has been developed in parrallel with the urban optioneering process and estimation of enabling infrastructure costs. The financial principles, methodology and approach are covered in this version of the Financial Case, however, the financial impacts

Futher updates will be provided in due course as this approach is finalised and final

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Table of contents

1.	Intro	duction		6
	1.1	Purpo	ose	6
	1.2	Backg	ground	6
	1.3	Projec	ct scope	7
	1.4	Overv	view of the Financial Case	8
		1.4.1	Bringing together the transport and urban solutions	8
	1.5	Provic	ding opportunities for Māori	88
		1.5.1	Background and context	9
		1.5.2	Investment and partnership opportunities	10
		1.5.3	Specific Investment Opportunity mechanisms	10
2.			mmary	13
3.	Cost	analysis .		14
	3.1	Transp	oort costs	14
		3.1.1	Scope and definition of transport costs	14
		3.1.2	Assumptions	15
		3.1.3	Approach	
		3.1.4	Capital (delivery) costs	
		3.1.5	Lifecycle costs	18
		3.1.6	Operating costs	18
	3.2	Costs	associated with the urban elements	19
		3.2.1	Urban enabling infrastructure	19
		3.2.2	Costs of urban interventions	21
		3.2.3	Costs	22
4.	Fund	ing and	financing for transport	23
	4.1	Rever	nue	23
		4.1.1	Scope, assumptions and approach	23
		4.1.2	Farebox revenue	23
		4.1.3	Premium farebox charge	24
		4.1.4	Advertising	24
	4.2	Implie	ed funding gap (real)	24
	4.3	Appro	bach to funding analysis	25
		4.3.1	Overview of approach	25
	4.4	Overv	riew of evaluation approach	27



4.5	Benefi	iciary analysis	28
	4.5.1	Overview and approach	28
	4.5.2	Findings and results	28
	4.5.3	Further analysis for the 'local landowner' beneficiary group	29
4.6	Afford	lability	29
	4.6.1	Overview and approach	29
	4.6.2	Approach to landowner affordability	30
	4.6.3	Mitigating affordability through postponement	31
	4.6.4	Approach to organisational affordability	32
4.7	Value	capture (LVUM)	33
4.8	Fundir	ng sources evaluation	
4.9	Overv	iew and evaluation of the funding scenarios.	36
	4.9.1	Context and background	36
	4.9.2	Definition of the funding scenarios	37
	4.9.3	Overview of the beneficiary pays with new tools scenario	
	4.9.4	Capital (delivery) funding	
	4.9.5	Lifecycle / renewals funding	
	4.9.6	Operating expenditure funding	41
	4.9.7	Project cash flows	42
	4.9.8	Overview of the balanced affordability and beneficiary pays scen	
	400		
	4.9.9	Capital (delivery) funding	
	4.9.10	Lifecycle / renewals funding	
	4.9.11	Operating expenditure funding	
	4.9.12	Project cash flows	
	4.9.13	Overview of the outcomes focus scenario	
	4.9.14	Capital (delivery) funding	
,	4.9.15	Lifecycle / renewals funding	
	4.9.16	Operating expenditure funding	
	4.9.17	Project cash flows	
4.10	4.9.18	Evaluation of the funding scenarios	
4.10		cing analysis	
	4.10.1	Approach	
	4.10.2	Financing principles and evaluation criteria	
	4.10.3	Privately financing specific scope elements	
	4.10.4	Privately financing specific funding tools	
	4.10.5	Infrastructure Funding & Financing	55



		4.10.6	Premium farebox	.56
		4.10.7	Congestion charge	.56
		4.10.8	Structural financing model options	.57
		4.10.9	Illustrative financing solution	58
	4.11	Impact (assessment	.59
		4.11.1	Introduction	59
		4.11.2	Impact on landowners	.59
		4.11.3	Impact on organisations	.62
		4.11.4	Beneficiary alignment	.62
		4.11.5	Overall conclusions	
5.	Fundin	g and Fi	nancing Urban	.64
	5.1	Urban e	nabling infrastructure	.64
		5.1.1	Status quo funding	
		5.1.2	Financing	.65
		5.1.3	Impact	. 65
	5.2	Urban ir	nterventions	.65
		5.2.1	Approach	. 65
		5.2.2	Principles and considerations	. 65
		5.2.3	Funding	.65
		5.2.4	Financing	.65
		5.2.5	Impact	.65
6.	Overal	l affordak	oility	.66
	6.1	Ratepay	ver affordability	.66
	6.2	Organis	ational affordability	. 67
7.	Sensitiv	vities and	scenario analysis	.69
8.	Project	t conting	encies	.70
9.	Next st	eps	•	.71
Appe	ndix A	Technico	al cost appendix	1
Appe	ndix B	Benefici	ary analysis	1
Appe	ndix C	IFF		1
Appe	ndix D	LVUM		1
Appe	ndix E	Affordat	oility analysis	2
Appe	ndix F	Funding	tool evaluation	3
Appe	ndix G	Funding	Scenarios Report	4
Appe	ndix H	Financir	ng	5
Anne	ndiy I	Modela	issumntions	4



Figures

Figure 1 - Sponsoring Minister funding principles	7
Figure 2 - Level of detail provided in the Financial Case for the different scope elements	8
Figure 3 - Annual real capital (delivery) costs	17
Figure 4 - Annual nominal operating and lifecycle costs	19
Figure 5 - Project costs, revenues and funding requirement	25
Figure 6 - Overview of approach to developing a preferred funding solution	26
Figure 7 - Summary of evaluation criteria	27
Figure 8 - Beneficiary types and geographies	28
Figure 9 - Beneficiaries and organisations considered in affordability analysis	. 29
Figure 10 - Cash flow affordability measures	30
Figure 11 - Cash flow affordability measures (Measures 1 to 3)	31
Figure 12 - Summary of funding sources and evaluation	35
Figure 13 - Capital phase funding on an NPV basis (\$m)	40
Figure 14 - Operating cost funding on an NPV basis (\$m)	41
Figure 15 - Indicative project funding cash flows	42
Figure 16 - Capital phase funding on an NPV basis (\$m)	44
Figure 17 - Operating cost funding on an NPV basis (\$m)	46
Figure 18 - Indicative project funding cash flows	46
Figure 19 - Capital phase funding on an NPY basis (\$m1)	49
Figure 20 - Operating cost funding on an NPV basis (\$m)	50
Figure 21 - Indicative project funding cash flows	50
Figure 22 – Evaluation of the funding scenarios	5
Figure 23 - Approach to developing the financing strategy	51
Figure 24 - Evaluation criteria	52
Figure 25 - Evaluation framework for privately financing specific funding tools	53
Figure 26 - Preferred financing solution	59
Figure 27 - Overview of preferred funding option local / regional impacts (Transport)	60
Figure 28 - Cash flow affordability measures (Measures 1 to 3)	60
Figure 29 - One-off affordability impact across CC2M suburbs	61
Figure 30 - Proportion of local land value uplift captured by the IFF levy at each station	
catchment	
Figure 31 - Mid-point beneficiary allocation vs preferred funding scenario cost allocation	
Figure 32 - Benefits captured by allocated funding – Beneficiary groups	
Figure 33 - Benefits captured by allocated funding – Beneficiary geographies	
Figure 34 - Overall ratepayer affordability including ALR CC2M transport and urban costs	66
Figure 35 - Overall ratepayer one-off affordability including ALR CC2M transport and urban	, –
	6/
Figure 36 - Auckland Council ALR CC2M transport and urban affordability vs. baseline (illustrative)	67



Tables

Table 1 Specific investment opportunity mechanisms	10
Table 2 - Definition and source of project costs	14
Table 3 – Total (real) base delivery cost and risk/contingency provisions	16
Table 4 - Total (real) lifecycle costs	18
Table 5 - Total (real) annual base operating costs	18
Table 6 - Overview of Urban Enabling Infrastructure investment (\$m)	20
Table 7 - Overview of urban interventions	21
Table 8 - Annual additional farebox revenue estimate (real, NZ\$m)	23
Table 9 - Real project cash flows	24
Table 10 - Mid-point beneficiary allocation	29
Table 11 - Key observations from organisational affordability analysis	32
Table 12 – Beneficiary pays with new tools scenario: tools and settings – core transport cap	оех 38
Table 13 – Beneficiary pays with new tools scenario: Tools and settings – Renewals capex	39
Table 14 - Beneficiary pays with new tools scenario: Tools and settings - Opex	39
Table 15 – Balanced affordability and pays scenario: tools and settings – core transport cap	
Table 16 - Balanced affordability and pays scenario: Tools and settings – Renewals capex	
Table 17 - Balanced affordability and pays scenario: Tools and settings – Renewals capex Table 17 - Balanced affordability and pays scenario: Tools and settings – Opex	
Table 18 – Outcomes focus scenario: Tools and settings – core transport capex	
Table 19 - Outcomes focus scenario: Tools and settings – Renewals capex	
Table 20 - Preferred funding solution tools and settings – Opex	
Table 21 - Opportunities for privately financing individual scope elements	
Table 22 - Initial screening of funding tools for private finance	
Table 23 - Evaluation of privately financing specific funding tools	
Table 24 - Structural financing options	
Table 25 - Evaluation of structural financing options	
Table 26 - Status quo funding and financing arrangements	
Table 27 - Auckland Council debt headroom including ALR CC2M transport and urban	0 1
(illustrative)	68
(illustrative)	



Introduction

1.1 Purpose

The purpose of the Financial Case is to:

- outline the whole-of-life costs for the preferred transport solution;
- identify the funding sources required to implement and operate the project, including associated risks and uncertainties;
- outline the proposed approach to financing the capital costs;
- demonstrate that the preferred transport solution is affordable;
- establish the principles for funding and financing urban interventions, including the delivery of critical enabling infrastructure; and
- summarise the likely financial impacts of the urban intervention options being considered.

The Financial Case builds upon the Indicative Business Case (IBC) and incorporates the most recent cost estimates for the preferred transport solution, which are based on the best available information at the time. Updated funding and financing sources are also included. It considers the financial impacts resulting from both the transport and urban elements. The level of detail covered in relation to the different elements is summarised in Section 1.4.1.

1.2 Background

The IBC identified a short list of potential funding and financing sources but did not determine a preferred solution. The Financial Case builds on the IBC work, by reflecting Sponsoring Minister guidance, refinement of the project scope and design development, and more detailed cost analysis. It sets out a recommended funding and financing solution that demonstrates that the project is affordable. It also highlights the funding and financing levers that could be flexed and adapted as discussion between Sponsors continue.

Sponsoring Ministers provided formal guidance through the Funding Principles Letter in November 2022 on the expectations for the funding and financing work to be undertaken for the Auckland Light Rail City Centre to Māngere Corridor Business Case (ALR CC2M CBC) through eight funding principles, including two higher priority 'core' principles, were confirmed through the Sponsoring Minister guidance, which underpinned the financial analysis undertaken.



Figure 1 - Sponsoring Minister funding principles



In addition to the eight funding principles, Sponsoring Ministers also provided the following guidance to inform funding and financing work to be undertaken for the CBC:

- a range of scenarios should be considered to highlight the trade-offs of the above funding principles;
- the IBC long-list does not need to be revisited and instead the CBC should focus on more detailed design choices;
- further work should be undertaken on potential value capture mechanisms (Land Value Uplift Mechanism or LVUM). This would not apply to small residential landowners and would be in addition to the Intrastructure Funding & Financing (IFF) framework;
- beneficiary pays should be considered, including options where Auckland Council make a financial contribution;
- a traditional Public Private Partnership (PPP) model (or similar structure) is to be explicitly excluded; and
- opportunities with Māori organisations and other private sector partners should be explored.

1.3 Project scope

ALR CC2M involves the delivery and operations of a 24km passenger railway running between Wynyard Station in the City Centre and Auckland Airport, including a mono-bore tunnel between Wynyard to Wesley, at-grade and elevated sections. It comprises two tracks, six underground stations, eleven surface stations, one depot and a bridge crossing of the Manukau Harbour.

The project will also involve a range of urban interventions, including the delivery of critical enabling infrastructure (i.e., three waters infrastructure, community facilities and reserve/open space development). The CBC (through the Economic Case and Urban Commercial Case) has explored a spectrum of growth scenarios and associated urban interventions. These are expected to be refined and assessed in further detail through future Urban Detailed Business Cases. The Financial Case provides an initial indication of the potential high level financial implications of the different growth scenarios, focusing on the 'Urban Minimal Investment Option', which will be refined in subsequent iterations.



1.4 Overview of the Financial Case

1.4.1 Bringing together the transport and urban solutions

A key change since the IBC is the inclusion of the urban elements (including enabling infrastructure and complementary urban interventions) into the business case alongside the transport solution. To reflect the nature of the different decisions being sought for the transport and urban elements, the Financial Case considers the two elements separately and then brings them together to assess the overall implications on costs, funding and financing, and affordability.

The level of detail included differs between the two elements to reflect the level of scope definition and design development:

- the transport elements are completed to a Detailed Business Case (DBC) level to provide sufficient detail to seek an investment decision; and
- the urban elements are generally completed to an IBC level. The level of information
 provided in the Financial Case is intended to provide an indication of the level of financial
 investment required under the different urban scenarios, the associated financial
 impacts, and whether the level of investment required is likely to be affordable to support
 progression to a DBC where the scope and associated cost estimation will be refined.

The approach is summarised in Figure 2 below.

Figure 2 - Level of detail provided in the Financial Case for the different scope elements



1.5 Providing opportunities for Māori

[Drafting Note: This section is currently an early working draft; and requires further work and refinement as part of a future iteration. It draws heavily on the content prepared by the Te Tiriti Partnerships Workstream.]

The Project has considered a range of investment opportunities for Māori. At this stage, the project is signalling the creation of a Partnership Status for Mana Whenua to invest in ALR CC2M. Broadly, the Partnership Status covers initiatives that can be grouped into two approaches:

- Pre-market engagement with Mana Whenua and iwi investment groups to provide an opportunity to submit an expression of interest for investment opportunities.
- Development of bid evaluation criteria that include a material weighting to bids that include investment structures and participation provisions for Mana Whenua and iwi investment groups.



These approaches are broadly consistent with wider government initiatives and are increasingly being adopted in New Zealand. There are a wide range of deal structures capable of being evolved to facilitate lwi partnerships.

The 'Māori economy' is rapidly growing as iwi entities establish significant balance sheets and engage in investment partnerships on a range of investment and development opportunities. Investment objectives are typically long term and well aligned with the intergenerational nature of the ALR CC2M project and its targeted urban development outcomes.

1.5.1 Background and context

Te Rautaki Huanga Māori (Te Rautaki) 2021 was developed for the IBC and endorsed by 11 out of 15 Mana Whenua leaders. It outlines the engagement undertaken by ALR Ltd and the outcomes and commitment to establishing genuine and enduring relationships with Mana Whenua and Māori and ensure outcomes for success. Te Rautaki Māori is te tūāpapa or foundation for the Te Tiriti Partnerships within the Project and for integration across all work programmes.

Te Ōhanga Māori - the Māori Economy work programme builds on the economic opportunities outlined in Te Rautaki. This includes commercial partnerships and investment, procurement, capacity, and capability building for Māori and pakihi Māori (Māori Business) identification and development.

Māori rights and interests in ALR derive from Te Tirifi o Waitangi which sets the relationship between Māori and the Crown. Cabinet outlined expectations for the Māori-Crown relationship in ALR's establishment. In particular.

- the need to partner with Māori in ALR reasonably, honourably and in good faith. This
 includes taking positive steps to ensure that Māori rights, roles and responsibilities
 are protected;
- that Māori and the Crown receive the necessary assurance that the Crown's Treaty obligations are being met;
- that ALR represents a significant opportunity to make a step change in how Māori and the Crown work in partnership on major projects by embedding practices that move from engaging to empowering Mana Whenua.

The Crown principles of Protection, Partnership and Participation sit alongside the values of Mana Whenua for rangatiratanga and kaitiakitanga, amongst other matters, as outlined in Te Rautaki Māori.

Genuine partnership is described as:

- establishing authentic and enduring relationships including governance and decision-making;
- Mana Whenua ability to influence key decisions as partners;
- driving positive social, cultural, environmental outcomes for Māori;
- early engagement and resourcing.

For the Financial Case, the focus is on the commercial partnerships and investment workstream within Te Ōhanga Māori, particularly those with Mana Whenua.



1.5.2 Investment and partnership opportunities

Mana Whenua and the Māori economy (Māori investment entities outside of Tāmaki Makaurau) present a unique opportunity for ALR to attract 'patient' capital (i.e., 50–100-year horizons). Mana Whenua have a long relationship with Tāmaki Makaurau and for a Mana Whenua investor, this is enduring.

Mana Whenua are already significant contributors to the Tāmaki Makaurau investment landscape with various large-scale investments. They bring a long-term positive perspective to investments that align with major infrastructure projects like ALR, with its long-term intergenerational approach. It can be considered a positive attribute for ARL.

The Project has noted that Mana Whenua:

- have unique and established relationships with ALR and wish to fully leverage investment opportunities with ALR (direct and indirect);
- as Strategic Investors will continue to invest in enabling infrastructure;
- can attract capital from the wider Māori economy;
- as long-term investors, can make long term financial returns while delivering community outcomes.

The Project has considered a range of Partnership Status mechanisms that could be afforded to Mana Whenua, which include:

- providing a 'head start' on the market through giving potential Mana Whenua investors a non-exclusive right in the EOI process that is timebound;
- establishing EOI weightings that capture Broader Outcomes and support relationships between Mana Whenua and other commercial partners;
- continuing to provide for the market tension required as this is timebound and non-exclusive.

Some recent examples of where these mechanisms have worked well are the commercial development approaches between Mana Whenua and Eke Panuku, such as the 'Downtown Carpark between Ngāti Whātua Ōrakei and Precinct Properties.

1.5.3 Specific Investment Opportunity mechanisms

Some specific investment opportunity mechanisms that have been considered are outlined in the table below.

Table 1 Specific investment opportunity mechanisms

Potential structure	Opportunities	Risks	General comments
Mana Whenua Strategic Partnership It is important to recognise the broader role mana whenua will play as a strategic partner in future infrastructure investments i.e. Water, Enabling Infrastructure, Housing/Property.	Potential to provide access to property development and property ownership / investment opportunities for mana whenua / iwi groups via partnership with local or international capital partners who have property development expertise (noting the complexity	Potential that land receipts to support project (rail) funding fall below expectations if these opportunities are restricted to a smaller market of potential bidders / interested parties without full competitive tension and value engineering. Difficult to establish	Note that residual land opportunities are unlikely to be available (for investment / development) until completion of the rail. OSD opportunities (if these are advanced / enabled) may be available earlier if procured with the stations.



Mana Whenua and Iwi **Collective investment** and scale of whether a true 'market value' is being development have unique structures envisaged on the OSD achieved in a single relationships and investment opportunities and residual land is bidder context. access to wider pool of presented to mana significant in the New If the opportunities go capital from within the Zealand context). This to the wider market whenua with a 60-90 Māori economy, day timeframe to also provides an beyond the pre market government and submit a pre-market opportunity smaller or EOI process, there may existing investment EOI outlining potential more capital be reluctance from the partners. market to bid (which partners and constrained mana Mana Whenua have investment structures. does require whenua entities. leveraged their unique significant financial May be an opportunity relationships, access to investment) if they do to bring new land and capital to not think they have a international investors execute large chance of success. transaction both / capital and expertise domestically and with into the market; there is a high level of international investors interest in indigenous including: partnering • Tauhara North No.2 opportunities (this is Trust & Sumitomo genuinely seen as an Geothermal opportunity / positive Projects. rather than a risk / Tainui Group detractor). Holdings & Accor Hotels A greater weighting to Tailor urban This would apply to DA, Weightings and non non-financial EOI and RFDPs. financial attributes procurement (e.g. EOI, RFDP and DA) scoring outcomes may result ALR can drive in selection of a party partnership / structuring to opportunities for Mana support social, that has bid a lower environmental and brice, and therefore Whenua by inserting non-financial cultural outcomes and (negatively) impact attributes into the support investor / land receipts available formal procurement development to support project partnership with Mana process funding. Whenua. There will need to a Opportunity for mana wider discussion on whenua to shape probity and a decisionurban development making matrix that will outcomes prior to the need to be applied in market bidding with a the next phase of work. solution. Creates opportunities for iwi / mana whenua to partner with experienced property capital / developers if these parties have a greater chance of successful bids under such structures. **Surplus land disposals**

- RfRs outside of Treaty Settlement process.

An RfR opportunity on residual land would come to mana whenua / iwi investment group and they would determine whether they want to approach this alone, collectively

The OSD / residual land analysis assumes that ALR Ltd can sell an unencumbered freehold interest in the OSD and residual land opportunities. There is a risk that 'true' market

Mana Whenua are a strategic partner with ALR. We believe this provides mana whenua access to offmarket opportunities to fulfil wider mana whenua aspirations for



	(with other iwi / Mana Whenua) or with another (non-Māori) capital partner?	value would not be maximised without an on-market / competitive process.	ALR adjacent or related developments that add value to the broader outcomes of the ALR project i.e. residential development.
Advertising - participation in allocation of advertising rights	We would like to signal Mana Whenua interest to participate in advertising opportunities along the route.	It is assumed that advertising revenue would accrue to the owner or operator of the stations.	

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Executive summary

To be completed at the end.

- Summarise key points from the Financial Case
- Bring together transport and urban

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3. Cost analysis

3.1 Transport costs

3.1.1 Scope and definition of transport costs

[Drafting note: this section is not yet fully drafted. It has been completed in parallel with the development of the capital and operating costings, as well as underlying cost reports. The cost reports referenced will be appended to the Financial Case.

Further updates to the Financial Case will be completed once the project scope, design and costings have been finalised.]

This section outlines the delivery and operating costs for the transport solution. The following cost categories have been used throughout the Financial Case.

Table 2 - Definition and source of project costs

Category	Sub-category	Definition	Source
Capital (delivery) Costs	Pre- implementation	Includes client internal costs, development of a reference design, resource management and consent preparation, procurement costs, etc.	Auckland Light Rail Design Alliance
	Property	Costs associated with acquiring the land required for the transport construction.	Auckland Light Rail Design Alliance
	Tunnels	Costs associated with the tunnelling, including tunnel construction and MEP.	s 9(2)(b)(ii)
	Stations	All capital costs associated with belowand above ground stations, including excavation, structures, MEP vertical transport and fit-out. Utilities relocation work at stations is also included (~\$275m).	
	Civils	Civils capital costs, including viaducts, trenches/retaining structures, and earthworks.	
	Rail systems and Depot	 Capital costs associated with: the moving rail components, including track, power supply, operational communications, signals, and fare collection, etc. depot, including traction power, earthworks, and buildings and facilities. 	
	Fleet/Rollingstock	Rollingstock acquisition costs include: the supplier delivery phase support and mobilisation costs, the initial rolling stock fleet and spares, and the special tools and equipment.	Auckland Light Rail Design Alliance
	Other	Any other capital costs not belonging to the above sub-categories, including business disruption.	Auckland Light Rail Design Alliance



Category	Sub-category	Definition	Source
Operating costs	Staff costs	All staffing labour and sundry expenses.	Auckland Light Rail Design Alliance ^{5 9(2)(b)(ii)}
	Rail systems	Operating expenditure associated with the rail systems.	Auckland Light Rail Desian Alliance s 9(2)(b)(ii)
	Power	Energy / power costs associated with running the system.	Auckland Light Rail Desian Alliance ^{\$ 9(2)(b)(ii)}
	Testing and commissioning	All costs associated with testing, commissioning, and pre-operations establishment.	Auckland Light Rail Design Alliance \$ 9(2)(6)(ii)
	Other operating expenditure	Any other operating expenditure, e.g., insurance, fees, etc.	Auckland Light Rail Design Alliance (2)(b)(ii)
Lifecycle costs	Depot buildings	Renewal of the buildings at the depot site.	Auckland Light Rail Design Alliance ^{\$ 9(2)(b)(ii)}
	Stations	Renewals at stations, including vertical transport and MEP.	Auckland Light Rail Design Alliance \$ 9(2)(b)(ii)
	Tunnel MEP	Renewal of the MEP elements of the tunnels.	Auckland Light Rail Design Alliance 5 9(2)(b)(ii)
	Fleet / rollingstock	Renewal of rollingstock.	Auckland Light Rail Design Alliance s 9(2)(b)(ii)

3.1.2 Assumptions

A summary of the key assumptions underpinning the cost estimates for the preferred transport solution is provided below. Detailed assumptions are provided in the supporting appendix.

- Staging:
 - o Stage 1/ Onehunga Depot to Dominion Junction
 - Stage la Surface rail from Onehunga Depot to Wesley Station.
 - **Stage 1b** Tunnelled rail from Wesley to Dominion Junction (Passenger journeys terminating at Kingsland).
 - Stage 2 Tunnelled rail from Dominion Junction to Te Waihorotiu (Aotea) Station.
 - Stage 3 Surface rail from Onehunga Depot to Airport. This stage may be further divided into:
 - Stage 3a Onehunga Depot to M\u00e4ngere Town Centre
 - Stage 3b Mangere Town Centre to Airport
- The period modelled is the:
 - o Delivery period: 1 October 2026 to 1 June 2036
 - o Operations period: 1 July 2031 to 30 June 2090 (60 years)



- Operations is staged, with:
 - o Stage 1 (Onehunga to Kingsland) commencing on 1 July 2031
 - o Stage 2 (Kingsland to Aotea) commencing on 1 July 2032
 - o Stage 3a (Onehunga to Mangere Town Centre) commencing on 1 July 2033
 - o Stage 3b (Mangere Town Centre to Airport)
- Costs are presented in Real, June 2023 dollar terms
- Financial years are used (i.e., 2024 refers to the year between 1 July 2023 and 30 June 2024)
- Rollingstock: delivery of [68 vehicles]
- Financing costs for the Infrastructure Funding and Financing Levy (IFF): [170bps above the Government Bond Curve]
- Crown financing costs: 5.24%
- Auckland Council financing costs: 6.14%
- Escalation: [Inflated based on forward estimate of the Capital Goods Price Index (CGPI), Producer Price Index (PPI) and Labour Cost Index (LCI). The Cost Consultant advised on the appropriate combination to form a weighted average index for the different capital and operating components]

A comprehensive outline of all the detailed assumptions used to estimate the transport costs is provided in the Cost Report and Financial Model Assumptions Appendices.

3.1.3 Approach

[Drafting Note: To be updated once the Cost Estimate Report has been drafted. Need to add a comment about the completion of a Quantified Risk Assessment (QRA), given this is a high risk DBC].

A complete overview of the methodology used to estimate the transport costs is provided in the Cost Report, which is appended.

3.1.4 Capital (delivery) costs

The capital (delivery) costs (2)(b)(ii) and have been prepared to a Class 4 estimate level. A probabilistic Monte Carlo simulation was undertaken to produce the statistical confidence levels for the cost estimates. Risk-adjusted costs are based on P(50) and P(95) estimates.

Given the size/scale of the project, its long construction timeframe, and the fact it will be the first project of its mode in New Zealand; there is inherent risk and uncertainty in the cost estimation. To manage this risk, the capital (delivery) costs have been independently reviewed by E3 Advisory who have recent experience in projects of similar scale and complexity across Australia. The costs were also benchmarked against comparable international projects to confirm the overall 'reasonableness' of the figures.

Table 3 below summarises the delivery phase costs for the transport solution, including the provisions for risk/contingency.

Table 3 – Total (real) base delivery cost and risk/contingency provisions

Cost category (\$m, real)	Stage 1	Stage 2	Stage 3	Full alignment	Total
Pre-implementation	46	28	25	1,008	1,108
Stations	1,285	1,358	522	5	3,165
Rail Systems and Depot	1,085	84	927	=	2,096

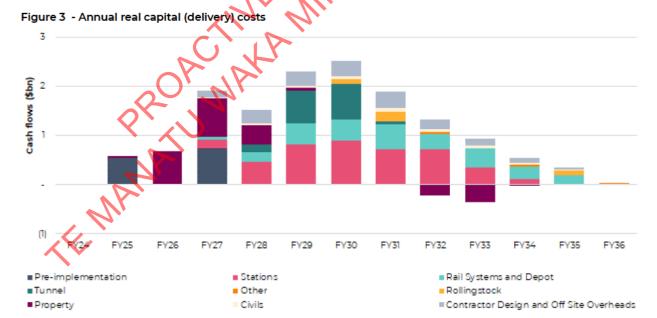


Cost category (\$m, real)	Stage 1	Stage 2	Stage 3	Full alignment	Total
Tunnel	683	561	4	-	1,248
Other	35	24	19	-	78
Utilities & Early Works	-	-	-	-	•
Rollingstock	152	76	76	-	304
Property	-	-	-	1,356	1,356
Civils	121	13	180	-	313
Contractor Design and Off-Site Overheads	578	420	257	160	1,415
Total base cost estimate	3,986	2,564	2,010	2,524	11,084
Contingency	1,156	763	547	755	3,221
Total project expected P(50) cost estimate	5,142	3,327	2,557	3,279	14,305
Funding risk (AACE Level 4)	932	615	44]	608	2,596
Total project expected P(95) cost estimate	6,074	3,942	2,998	3,887	16,901

Note: Definitions of the cost categories can be found in Section 3.1.1 above.

The estimated nominal capital (delivery) costs are shown in Figure 3 below. To calculate the nominal costs, the real capital (delivery) costs summarised above have been inflated annually based upon the construction escalation factors 30(2)(b)(ii) No financing costs have been included in the costs outlined below

[Drafting Note: The negative cost values are a result of the current treatment of the property costs and revenues. These will be refined as part of future updates].



Document number ALRPC-ALRA-XXXXXXXXXX-XXX-BC-FNC-RP-RPT-000001 2023-11-24 Revision 2.02 Page 17



3.1.5 Lifecycle costs

Lifecycle costs are the costs associated with renewing and replacing assets as they reach the end of their useful lives. These estimates have been provided by the Auckland Light Rail Design Alliance \$\frac{s 9(2)(b)(ii)}{2}\$. The real lifecycle costs cover a period of 60 years and are summarised in Table 4 below.

Table 4 - Total (real) lifecycle costs

Category (\$m, real)	Total
Stations	1,564
Railway Track & Systems	762
Tunnel MEP	76
Depot Buildings	73
Rollingstock	520
Total lifecycle costs	2,994

Note: Definitions of the cost categories can be found in Section 3.1.1 above.

3.1.6 Operating costs

Operating costs are the expenses that are associated with the project's operations, including maintenance costs. A staged opening is proposed for the project, which means that there will be an overlap between the delivery and operations phases.

The operating costs were estimated by the Auckland Light Rail Design Alliance 9(2)(b)(ii)

. As with the capital (delivery), costs, these were benchmarked against comparable projects (where information was available) Table 5 below summarises the real operating costs.

Table 5 - Total (real) annual base operating costs

Category (\$m p.a., real)	Total
Staff/Labour	76
Staff Sundries	6
Insurance	5
Fees etc.	1
Stations Power/rates	8
Stations (Materials etc.)	2
Depot Building	0
Rail Systems	10
Tunnel MEP	1
Power	17
Total operating costs	126

Note: Definitions of the cost categories can be found in Section [3.1.1] above.

The estimated annual ongoing costs (operating and lifecycle / renewal) are shown in Figure 4 below.



[Drafting Note: The operating costs shown below reflect the full operating costs associated with the full alignment. Future iterations will have the operating expenditure phased in to reflect staged operations].

900
800
700
600
400
300
200
100
FY23
FY28
FY33
FY38
FY43
FY45
FY48
FY53
FY58
FY63

Figure 4 - Annual nominal operating and lifecycle costs

The large 'spike' in Lifecyle / renewal costs reflects the acquisition of additional rollingstock (\$303 million, real) in 2065.

3.2 Costs associated with the urban elements

The ALR CC2M CBC also considers the urban interventions that will be required to fully realise the benefits of the transport investment. Through the urban optioneering process, a range of urban scenarios were considered, including the following two 'bookends':

- the 'Urban Minimal Investment Option' housing, employment and distributions within the corridor are driven by ALR accessibility only (i.e., based on the preferred transport option). This assumes 18% of Auckland's growth to 2051 occurs in the corridor; and
- the 'Active Investment Option' brings forward 2065 accessibility-based and baseline growth through targeted interventions. This shows that 29% of Auckland's growth by 2051 occurs in the corridor.

Each of these scenarios require differing levels of supporting investment in urban enabling infrastructure. In addition, each scenario requires a different level and types of interventions to enable the expected level of housing and commercial density, all with varying degrees of cost. For the purposes of the Financial Case, the Active Investment Option has been used as the baseline, with high level commentary and sensitivity analysis used to highlight the implications of the Do Something+ scenario.

3.2.1 Urban enabling infrastructure

3.2.1.1 Scope, assumptions and approach

Incremental investment in enabling infrastructure will be required to support the level of growth enabled by ALR CC2M over and above the baseline growth under the Transport Do Minimum (No ALR).

As part of the ALR CC2M CBC, a high-level estimate for the enabling infrastructure requirements through to 2065 was prepared for the following types of infrastructure:



- water supply;
- wastewater;
- stormwater;
- power (national grid / transmission network);
- green infrastructure (parks and open space);
- social infrastructure; and
- transport infrastructure.

Further detail on the approach to estimating the enabling infrastructure costs is included in [Part 3 of the Optioneering Report].

The Financial Case seeks to highlight the potential financial implications of this incremental infrastructure, using the status quo funding and financing arrangements as a baseline. This includes consideration of the potential impact on key financial metrics and ratios for the relevant organisations, as well as the end users (e.g., ratepayers) (refer Section 6 for further detail).

Some high-level commentary on the potential alternative funding and financing approaches that could be used to mitigate organisational and end user constraints is also provided in the Financial Case.

3.2.1.2 **Costs**

Table 6 below provides an overview of estimated urban enabling costs required by 2051 to support the Urban Minimal Investment and Urban Active Investment scenarios by infrastructure type. [All costs are in June 2022 present values, discounted at 4%].

Table 6 - Overview of Urban Enabling Infrastructure investment (\$m)

Cost category (\$m)	Baseline (no ALR)	Urban Minimal Investment	Urban Active Investment
Water	38	90	128
Wastewater	123	182	276
Stormwater	123	168	179
Power	75	75	79
Green infrastructure	70	91	144
Social infrastructure	292	415	692
Transport	446	719	719
Total	1,166	1,740	2,216
Total vs Baseline (no ALR)	-	574	1,050

Refer [Appendix 3.A.E] of the Economic Case for additional detail on the approach and methodology for estimating the above costs.

There will be a consequential operating expenditure impact resulting from the construction of the enabling infrastructure, which will increase the operating and maintenance costs for the respective asset owners. These costs have not been included in the Financial Case.



Further work on the enabling infrastructure investment will be undertaken as part of future Urban DBCs, which will include:

- refining cost estimates; and
- determining whether the enabling infrastructure is already addressed through projects included in long term plans / capital programmes.

3.2.2 Costs of urban interventions

3.2.2.1 Scope, assumptions and approach

As part of the Urban Optioneering process theoretical supply capacity was modelled for each catchment under the Urban Minimal Investment and Urban Active Investment scenarios. This analysis was undertaken to better understand whether there were other interventions required to achieve the desired level of growth under each scenario, such as planning a regulatory changes, catalysing development, and creating financial incentives / products for development in the ALR CC2M Corridor.

The interventions have been grouped into the following categories.

Table 7 - Overview of urban interventions

Planning & Policy	Interventions that remove, amend or (outside the ALR corridor) create planning controls to facilitate alternative outcomes. Includes interventions at both a strategy/system level and at a development level. These are focused on enabling supply through more favourable planning conditions.
Co-ordination	Interventions that provide new or enhanced public sector powers and mechanisms to achieve spatial outcomes.
Financial	Interventions that reduce the cost and risk of development. Urban enabling infrastructure is another financial cost, which is considered separately in the previous section.
Physical	Interventions that provide would involve works or on-the-ground actions by ALRL or other partner entities. This includes placemaking and catalyst development (direct development, land acquisition, local/central government tenancy etc).

There will be a financial impact of some of these interventions, including direct impacts such as the implementation cost, and indirect costs such as forgone revenue (e.g., a rates remissions policy to stimulate demand for housing in the corridor).

[Drafting note: work to be completed for the final version of the Financial Case once supporting work is finalised. Next iteration will include high-level commentary with detail at the urban DBC stage.]



3.2.3 Costs

Based on the findings of the Urban Optioneering process the following interventions were identified with estimated costs in brackets.

Intervention	Urban Minimal Investment	Urban Active Investment
Planning & policy		To be completed in the next iteration
Physical	No interventions identified	To be completed in the next iteration
Co-ordination	NO ITILEI VETILIOTIS IGETILITIEG	To be completed in the next iteration
Financial		To be completed in the next iteration
complete]		ons (and quantification of these) is
PRO MANA	ACTIVELY RELEASED.	



4. Funding and financing for transport

4.1 Revenue

4.1.1 Scope, assumptions and approach

Farebox revenue for ALR CC2M is treated as a revenue source for the project. The farebox revenue attributable to ALR CC2M is calculated based on the overall increase to fare revenue across the public transport network under the preferred transport solution relative to the total network revenue under the Do Minimum scenario.

Farebox revenue is derived from the Auckland Forecasting Centre (AFC) Transport Model and provided for the following years, with linear interpolation used to estimate the years in between:

- 2031
- 2041
- 2051
- 2065

As with the operating expenditure, the farebox revenue has not been adjusted to reflect the proposed staged opening.

Fares are assumed to be set based on Auckland Transport's Network Fare Strategy (i.e., ALR CC2M fares are set on the existing Auckland Transport fare matrices used for the current bus and rail services) and collected through the Auckland Transport's network ticketing system (currently AT HOP).

4.1.2 Farebox revenue

Table 8 below summarises the farebox estimate per Auckland Forecasting Centre (AFC) transport model outputs for years 2031, 2041, 2051, and 2065.

Table 8 - Annual additional farebox revenue estimate (real, NZ\$m)

Year		Preferred option
2031	20	35.8 (24% of opex)
2041		67.6 (35% of opex)
2051		83.5 (35% of opex)
2065		132.9 (40% of opex)

During the development of the Financial Case, alternative approaches to estimating the farebox revenue attributable to ALR CC2M were also considered, including:

- differentiated pricing (i.e., generally higher charges for ALR CC2M services);
- a proportional allocation of farebox revenue based on the proportion of ALR CC2M passenger kilometres travelled to total public transport passenger kilometres travelled; and
- average fare price multiplied by patronage on ALR CC2M services.

Further information on these options is presented as sensitivities in Section 7.



4.1.3 Premium farebox charge

A premium charge for travellers (excluding Airport workers) boarding and alighting at the Auckland Airport stations is considered a viable funding source for ALR CC2M and considered as a funding tool in developing funding scenarios. The premium charge is sized based on aligning the total fare to the SkyDrive direct service between the CBD and the Auckland Airport.

Rather than funding a portion of the operating costs, the associated revenue is assumed to be applied as a capital funding source to reduce the funding burden on ratepayers. As such, it is not included in the baseline project revenues below.

4.1.4 Advertising

Revenue could also be generated through selling advertising space at stops/stations, inside the rollingstock (i.e., small posters, etc.), or on the external shell. The Financial Case assumes a small annual revenue stream is available from advertising (\$4m p.a.) and commercial easing (\$2m p.a.). These estimates have been benchmarked against relevant local precedent (e.g., advertising at existing heavy rail stations).

4.2 Implied funding gap (real)

A summary of the real capital (delivery), lifecycle, operations and revenue cashflows for each of the modelled periods are shown in Table 9 below.

Table 9 - Real project cash flows

\$m, real	2031	2041	2051	2065	Total
Farebox	<u>u</u>	376	575	1,135	2,085
Commercial revenue	드	60	60	84	204
Revenue	- ()	436	635	1,219	2,289
Capital (delivery)	9,508	4,486	24	<u> </u>	13,993
Lifecycle	1/1	67	452	853	1,372
Operations	D -17	1,261	1,261	1,765	4,286
Total cash flows	9,508	6,249	2,348	3,836	21,941

Note: Table 9 represents cash flows for the years prior to that shown, i.e., the 2065 column shows costs for the years 2051 to 2064.

The project has a large cash outflow during the delivery period, as well as significant ongoing operating and lifecycle cash outflows. The project revenue streams (farebox and advertising revenue) are insufficient, resulting in a significant funding gap. This is shown in in the waterfall chart shown below.



490 713 70 12.000 2,081 10,000 8,000 12,366 6,000 10,508 4,000 2.000 Farebox ommercial Capex Opex Lifecycle requirement

Figure 5 - Project costs, revenues and funding requirement

4.3 Approach to funding analysis

4.3.1 Overview of approach

As with other major rapid transit projects across the world, the scale and breadth of ALR CC2M is significant. This means that a range of funding sources will be required as part of the overall funding solution. Sponsoring Minister Guidance includes the expectation that the different beneficiaries should contribute funding to the project in an affordable and equitable way. Financing is likely to be required to spread and smooth the capital (delivery) costs, which is explored in Section 4.9.18.

The funding approach was developed to be consistent with the Sponsors Guidance (refer Section 1.2: Background above) and the funding and financing principles developed through the 'Mega Projects' Workstream of the Land Transport Revenue Review.

The funding solution was developed collaboratively with representatives from the Treasury, the Ministry of Transport, and Waka Kotahi. This was achieved through holding a regular 'Funding & Financing Hui' between May and August 2023, where the financial analysis was discussed and worked through. Along with the Crown partners, Auckland Council was involved in the Hui in a technical capacity. Attendees at the regular Hui were also provided with all draft working and technical papers and provided feedback and insights on these and into the solution as it was developed.

A summary of the approach adopted to develop a preferred funding solution is provided below. Following on from the detailed beneficiary assessment, affordability analysis, and evaluation of the funding tools and sources; a number of different funding packages were developed that balanced beneficiary alignment, affordability, equity, and development incentives. Three of these packages were taken through to an evaluation to determine the preferred funding solution.



Figure 6 - Overview of approach to developing a preferred funding solution



A summary of the key steps in the approach is provided below:

- Beneficiary identification and allocation: In line with the 'beneficiary pays' core funding principle, analysis was undertaken to identify beneficiaries of the project and 'allocate' a portion of the benefit to different types of beneficiaries across different geographies (refer Section 4.5 and Appendix B: Beneficiary analysis). This analysis provided the starting point and baseline for allocating costs to different beneficiaries and funders.
- Affordability analysis: Assessment of the current affordability pressures for different beneficiaries, identification of thresholds by final beneficiary (i.e., end payer) and funding organisation, and the levers that could be used to improve affordability (refer summary in Section 4.6 and Appendix E: Affordability analysis). The affordability analysis informed the design of the funding scenarios (e.g., tool selection and settings), as well as providing an overall sense check of the funding solution as it comes together. Critically, the affordability analysis considers the overall impact of the project (i.e., including both the transport and urban elements (refer Section 6).
- Identifying a short list of tools by beneficiary type: Building on the IBC shortlist, tools are mapped to beneficiary types and evaluated against agreed evaluation criteria to determine tools to take forward into funding scenarios (refer Appendix F: Funding tool evaluation).
- Development of funding scenarios: Different combinations of funding tools and sources
 were combined to develop different funding scenarios. Each scenario has different
 impacts on affordability, outcomes and social acceptability and alignment with
 beneficiary pays principles. The preferred funding solution was selected as it performed
 the best against the evaluation criteria (i.e., best balanced the competing trade-offs).
 Alternative scenarios are also commented on in Appendix G: Funding Solution Report,
 where key trade-offs and considerations are highlighted.
- A two-stage evaluation was undertaken with an initial evaluation at the individual tool level, and a second evaluation comparing the three funding scenarios developed (refer Appendix G: Funding Solution Report) for further detail.
- **Urban revenues**: Appendix [x] of the Urban Commercial case identified potential residual land and over station development (OSD) sites that could be available for sale following construction of the transport infrastructure and ALR CC2M becoming operational. High level analysis has identified potential uplift on this land of approximately \$172m in net present value terms. At present there is no specific allowance for additional costs (land assembly, holding, station strengthening) that may be required to enable these. Given



the uncertainty over the timing and quantum of costs and revenues associated with direct active development, no specific allowance has been made for this in the financial analysis at this stage.

[Drafting note: this will be further refined as the approach to urban and delivery entity is confirmed, including providing information on the number, scope and costs / revenues associated with the identified Transit Oriented Development opportunities].

Detailed work on a conceptual value capture tool (Land Value Uplift Mechanism (LVUM)) was also undertaken to develop another potential funding source for consideration (refer Appendix F).

4.4 Overview of evaluation approach

A two-staged evaluation approach was adopted, which included an 'initial evaluation' at the individual tool level, and a 'second evaluation' comparing the three funding scenarios developed. The first evaluation focused on identifying the suite of tools that should be packaged into funding scenarios, with the second evaluation considering the overall packages as a whole (i.e. rather than focusing on the trade-offs of individual tools).

The evaluation framework and criteria were developed based on the project outcomes, the project critical success factors, and guidance from Sponsoring Ministers on their desired approach to funding (in particular, the set of funding principles outlined in the November 2022 Board paper). The framework was endorsed by the attendees of the regular Funding and Financing Hui. Changes to the evaluation criteria to respond to different policy settings may impact the analysis and overall conclusions.

Six criteria were used to evaluate the funding tools, with an additional three criteria used to evaluate the three funding solutions that were taken through for detailed assessment. The additional criteria were only applied to the evaluation of the funding solutions, as they need to be considered at a whole of funding solution level taking into account the suite of tools and sources together.

Figure 7 - Summary of evaluation criteria



A qualitative scoring approach was used, rather than a weighted quantitative approach, because the focus for the assessment was on drawing out the key trade-offs.



4.5 Beneficiary analysis

451 Overview and approach

Commensurate with Sponsor Minister Guidance, 'beneficiary pays' was a core guiding principle used to develop the funding solution for ALR CC2M.

"The distribution of whole of life project costs should be in accordance with the distribution of whole of life benefits across identified beneficiary groups".

Beneficiaries were classified into different beneficiary groups that assessed both the 'beneficiary type' and 'geography'. Each of the transport and wider economic benefits (WEBs) quantified through the Economic Case were allocated between these different beneficiary groups, which was used as the 'first principle' cost allocation (i.e., beneficiary groups were allocated a proportion of the capital costs that reflected their estimated proportion of benefits).



Findings and results 4.5.2

The beneficiary analysis identified alternative approaches to determining allocation with an adopted mid-point summarised in Table 10 below. Further detail and assumptions is provided in Appendix B: Beneficiary analysis.



Table 10 - Mid-point beneficiary allocation

% allocation	Local	Regional	National	Total
Public transport user	9.8%	4.2%	n/a	13.9%
Motor vehicle user	1.4%	9.4%	n/a	10.8%
Business owner	13.3%	0.1%	n/a	13.4%
Landowner	22.8%	4.7%	n/a	27.4%
General beneficiary	0.1%	0.1%	34.3%	34.5%
Total	47.4%	18.4%	34.3%	

4.5.3 Further analysis for the 'local landowner' beneficiary group

The beneficiary analysis highlighted the significant variation in benefits derived between beneficiaries within the 'local landowner' beneficiary group. The variation reflects the dissipation of the transport benefits as you move further away from stations, as well as land parcel specific considerations (e.g., land use, parcel size, connection to existing transport networks, etc.).

Given the magnitude of the differential between different properties, it was determined that it would be inequitable to allocate costs equally between all the landowners within the beneficiary group. Further, the analysis showed that many beneficiary groups would need to be created to enable an equitable cost allocation within the beneficiary group.

Accordingly, detailed funding tool design was the preferred mechanism to drive equitably through beneficiary pays. Under this approach, the land value uplift (LVU) estimates for different station catchments (received from LUTI) were used as a proxy for benefit allocation, which were used to determine the calculation of the infrastructure Funding and Financing (IFF) charges.

4.6 Affordability

4.6.1 Overview and approach

Given the large size/scale of the project, significant funding contributions are required from organisations and final beneficiaries (e.g., landowners/ratepayers). Detailed affordability analysis was undertaken to understand the potential impacts for both individuals and funding organisations, which is summarised in Figure 9 below.

Figure 9 - Beneficiaries and organisations considered in affordability analysis



Commensurate with the large share of benefits expected to be derived from Auckland landowners, the affordability analysis focused on residential and non-residential landowners, particularly those in the local catchments.

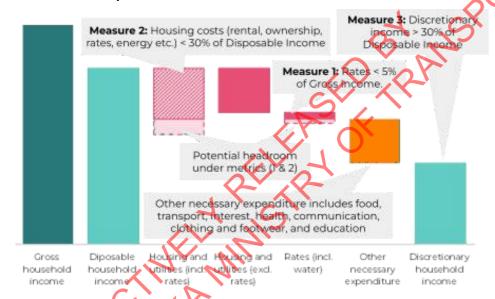


4.6.2 Approach to landowner affordability

Affordability is complex and subjective, with no single metric that can be used to determine whether a levy/charge is affordable. Accordingly, landowner affordability was assessed holistically through three different lenses (and five measures):

- Cash flow affordability as the practical affordability constraint (i.e., can an individual fund its levy/charge payments as they fall due), based on three measures (refer Figure 10 below):
 - Measure 1 Shand: Gross Income to Total Rates.
 - Measure 2 Housing measure: Housing Related Costs (rental, ownership, rates, energy, mortgage, etc.) to Disposable Income.
 - Measure 3 Discretionary Income: Discretionary Income to Disposable Income

Figure 10 - Cash flow affordability measures



- Increase to charges (Measure 4) to consider the relative impact of proposed charges vs the current ratepayer cost.
- Economic affordability (Measure 5) cost vs monetisation of benefit received.

The affordability analysis focused on the median 'landowner', with the impacts also shown for the lower and upper quartiles. The focus on homeowners, rather than renters, reflects economic theory and research, which indicates that land charges are borne by the homeowner, rather than being passed through to renters. This is because rental prices are set based on market forces (i.e., supply and demand), rather than a 'cost-plus' model where homeowners set rentals based on their underlying costs associated with the rental. However, given the potential for demand for rentals near stations (i.e., to reflect the improved accessibility), some 'pass-through' scenarios were developed to understand the potential impact on renters if rental prices did increase (refer Appendix E – Affordability analysis).

A slightly different approach was considered for non-residential landowners, given that the majority of commercial rental agreements are on a 'net' basis, where it is the lessee (rather than landowner) that is responsible for funding the rates/levies associated with the property. This reflects the direct 'pass-through', and therefore, different incidence of any new charges (or increase to existing charges).



Analysis was undertaken looking at affordability of median, upper quartile and lower quartile homeowners across seven suburbs along the ALR CC2M corridor. Key findings and approach applied in considering affordability in the Financial Case is included below.

Cash flow affordability

Cash flow affordability is a known constraint and tools and sources are set in a way that considers this. Figure 11 below provides a summary of cash flow affordability across the seven suburbs and three cash flow affordability measures. This reflects the status quo, without any additional ALR CC2M related charges/levies.

Figure 11 - Cash flow affordability measures (Measures 1 to 3)

Baseline affordability	Aucklai	nd (local)	Auckland	(regional)	Aucklan	d Central	Moun	t Eden	King	gsland	Mount	Roskill	Oneh	unga	Măr	ngere
percentages	LQ	Median	LQ	Median	LQ	Median	LQ	Median	LQ	Median	LQ	Median	LQ	Median	20	Median
Measure 1: Rates (incl. Water) / Gross Income	5.0%	3.1%	5.5%	3.2%	6.2%	3.1%	4.1%	3.3%	3.8%	2.9%	7.2%	3.9%	5.0%	3.2%	5.4%	3.2%
Measure 2: Housing costs / Gross Income	39.9%	34.8%	40.5%	34.9%	42.5%	36.8%	41.0%	28.9%	38.2%	29.1%	48.3%	33.0%	45.4%	34.2%	46.3%	28.9%
Measure 3: Discretionary Income / Disposable Income	8.1%	26.1%	7.5%	26.0%	2.0%	18.9%	10.8%	38.0%	16.9%	32.6%	(9.3%)	24.5%	1.8%	25.2%	0.3%	33.3%

This shows that there is headroom under the Shand 5% measure (Measure 1) implying there is capacity to increase rates. However, analysis of the two other measures suggests that current housing cost levels are relatively unaffordable. This is especially acute for lower quartile income earners.

The impact of the three assessed funding solutions on the cash flow affordability measures is summarised in the Impact Assessment outlined in Section 4.11.

Increase to charges

This affordability lens is focused on the impact of the incidence of the ALR CC2M charge in relation to overall charges, for local and regional landowners.

The settings of the funding sources have been designed and structured to ensure there minimise 'price-shocks' for landowners with exclusion of LVUM which would be assumed to apply upon disposal. This measure will be shown as a percentage increase in total property charges from current charges at local and regional levels.

The implied total rates/levy under the different scenarios is outlined in Section 4.11: Impact assessment.

Economic affordability

Economic affordability considers the extent that landowners are charged rates/levies relative to the overall capital cost of the project and attributable uplift in land value.

These metrics have also been assessed to ensure landowners are not making a funding contribution that is greater than the monetised benefits they receive from the project, on an NPV basis.

As with cash flow impacts, the economic affordability of the preferred solution was calculated for local / regional and residential / commercial ratepayers.

4.6.3 Mitigating affordability through postponement

Cash flow affordability can be mitigated through targeted financial support (i.e., a postponement mechanism), which could enable increased revenue generation without compromising affordability. However, this creates uncertainty around cash flows which may require additional forms of underwrite/support.

Through using postponement (or other targeted financial support mechanisms), the focus for affordability pressures shifts from 'cash flow' to 'economic', which can enable the project



to recover a greater proportion of costs from beneficiaries (particularly landowners). However, this will require landowners understanding and believing the quantum of estimated benefits.

Further discussion on the potential trade-offs/considerations relating to postponement is provided below as part of the IFF discussion (refer Section Appendix C – IFF).

Approach to organisational affordability

The focus for organisational affordability was understanding the capacity of the different organisations to make capital and/or operating contributions to the project. Summary findings are provided in Table 11 below.

Table 11 - Key observations from organisational affordability analysis

Organisation	Affordability considerations
Auckland Council	 Increasingly limited capacity to fund capex under current borrowing limits due to additional expenditure on City Rail Link and flood recovery expenses. Associated costs of ALR CC2M would further strain funding challenges. Potential for further asset sales (e.g., Auckland International Airport Limited (AIAL) shares and land holdings) and / or increasing debt-to-revenue ratio to fund a contribution. Implications to wider local government debt (via LGFA) to be considered. Auckland Council has explored these options in recent budgeting processes and implemented some of these, limiting the additional amounts that could be realised to support ALR CC2M.
	 Funding operating expenditure requires increased rates revenue. This is ultimately constrained by ratepayer affordability.
Waka Kotahi	 NLTF is not expected to provide a capital contribution to ALR. Policy work undertaken by relevant government agencies* recommended that alternative sources of Crown funding are used for 'mega projects,' rather than the NLTF. NLTF is under considerable financial pressure due to reduced revenues and increasing expenditure requirements. In the absence of significant changes to the NLTF, it is unlikely to have capacity to make an operating funding contribution. Increase to FED / RUC or new alternative revenue streams would be required.
Crown	 Crown support in some form is likely to be required. Capex and operating expenditure contributions would impact OBEGAL and the Crown's operating balance, however, given the scale of Crown balance sheet and finances, it is not likely to cause material issues. A Crown operating contribution is not expected, with this funded via the NLTF instead.
*Land Transport Reven	



The affordability analysis has been used to shape and size settings for funding tools (i.e., an 'affordable' level of rate or levy). It has also been used to consider the overall impact of the funding solution. This considers impacts of ALR CC2M as well as potential implications on ratios, metrics and headroom of funding urban enabling infrastructure and urban interventions. Potential funding of other mega projects will also need to be considered. Section 6 provides further details on overall affordability.

4.7 Value capture (LVUM)

Value capture refers to a funding mechanism whereby the government captures some the private economic benefit (realised as increases or expected increases in land values) created from delivering a public infrastructure project through taxes, levies or charges, which can be paid either upfront during project delivery or over time as land values increase. The shortlisted value capture (LVUM) mechanisms considered as part of this Business Case are:

- A windfall gains tax
- A betterment levy
- An IFF levy (refer to Section 4.10.5)

Windfall Gains Tax

A windfall gains tax is a one-off tax applied to properties that experience land value uplift from increased private economic benefits arising from the project, principally, in the form of rising land values. Under this mechanism, land valuations will be undertaken on a pre and post project basis with a proportion of the uplift taxed.

A windfall gains tax can be subject to a range of exemptions including:

- Minimum land value uplift threshold before fax is applicable
- Tiers of taxation
- Exclusions for residential land

To ensure affordability for those affected by the levy it may be prudent to allow taxpayers to postpone their levy payment until sale of property or a long stop date.

Betterment Levy

A betterment levy is imposed on targeted group of properties to capture a portion of the land value uplift realised following the project intervention. This is a bespoke charge that is applied to all properties that are determined to benefit from a project. The bespoke nature of the levy means that it does not need to be explicitly tied to expected land value uplift and can be flexibly structured.

Some of the betterment levy options considered as part of this Business Case are:

- Charging either an upfront or ongoing betterment levy
- Including different triggers for liability (I.e., only charging development properties or charging all properties)
- Using different calibration approaches (I.e., charging per sqm or charging per dollar of land value).

For more detail on value capture and LVUM, please refer to Appendix D – LVUM for more detail, including on the evaluation of the different LVUM approaches above.



4.8 Funding sources evaluation

The IBC short list of funding sources was used as the starting point for the evaluations, which were reviewed and reconsidered to reflect the current environment, including:

- high inflation;
- identification of other significant investment requirements (e.g., the Waitematā Harbour Connections);
- Water Services Reform: and
- government policy thinking on funding of Mega Projects.

Funding sources were identified to target each beneficiary type and have been evaluated against the criteria using a simplified red/amber/green approach. No weighting has been applied. The approach reflects the fact that no single tool can fund the whole project, and that instead a combination of different funding tools is required, some of which will address different evaluation criteria.

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A The evaluation results were discussed through the Funding & Finance hui and feedback was received and incorporated in the final evaluations.

Figure 12 below summarises the evaluation of the tools (refer Appendix F for further detail on

Document number ALRPC-ALRA-XXXXXXXXXXXXAXXABC-FNC-RP-RPT-000001 2023-11-24 Revision 2.02 Page 34



Figure 12 - Summary of funding sources and evaluation

	Funding Sources	Magnitude	Efficiency / simplicity	Stability / Certainty	Flexibility	Equity	Incentives	Progressed to funding scenarios	Capex	Opex
	General rate							1		
	Targeted rate (Auckland council)							×		
5 673	Targeted rate (SDP)							×		
Landowners	IFF Levy							1		
Lanc	LVUM							1		
	Vacant land tax							1		
	Allocation of new build rates							×		
	Business rate suppl. (targeted rate)*							×		
2 00	Business rate suppl. (SDP targeted rate)*							TBC		
owners	Business rate suppl. (IFF levy)*							1		
8 6	Retail / Commercial							-		<
	Advertising							-		
- ¥	Standard farebox							D/	-	
Users	Premium farebox							1		
w	Workplace parking levy (targeted rate)							.0		
Motor vehicle users	Workplace parking levy (legislative)							X		
	Increasing parking charges				-	5	1.	1		
	Congestion charging				1.		N	1		
oto	Extension of Regional Fuel Tax (RFT)				V			TBC		
2	NLTF				V	1		1		
	Crown appropriation					7,		1		
	Council contribution							×		
ş	Sale of existing land	-	4	. 0	'			1		
General beneficiaries	Strategic purchase / sale of land	/		11				1		
pene	Increase in the value of public land			7				1	TBC	TBC
lera	Hypothecation of tax		1					×		
Cen	National Infrastructure Levy		12					TBC		
	Project GST contribution	IP						1		
	Airport (Departure) Tax	1						1	•	
	Development Contributions (Auckland Council)							1		
ers	Development Contributions (Kainga Orei							1		
elop	Development Proceeds							TBC		
Dev	Development Law							TBC		
assine RS is a RS (tai	rate or levy on joins and or are supplement (BRS) definitions in attempted to the assessment are rate or levy on joins esidential properties. It can linguisted rate that the properties of the	nent crit	teria llows:		overnme	the asse	source doo ssment crit	eria	et	



The following key considerations summarise the findings from the evaluation:

- A large number of tools were taken through to funding scenarios to reflect the scale of the project and need to balance affordability and beneficiary pays.
- Generally, where tools weren't taken through, there were more efficient ways of obtaining funding from beneficiaries.
- Several tools can be used to recover cost and / or land value uplift from landowners. The IFF would enable a relatively material landowner contribution towards capital costs without impacting Auckland Council's balance sheet and can be set to address affordability considerations. General rates are likely still required to fund operating costs.
- The mechanism to recover cost from businesses (named business rate supplement in Figure 12 above) is facilitated by land-based tools such as general or targeted rate on an IFF levy.
- SDP tools have not currently been progressed as part of the Financial Case but could be used if an SDP is implemented. If used, it may be more appropriate for SDP tools to apply to enabling infrastructure requirements. They are likely to be better suited to support a programme of infrastructure works impacting a particular project area, rother than for a large project (such as ALR CC2M).
- The introduction of a congestion charge would provide a material source funding to capture benefit from motor vehicle users, as well as incentivise mode shift.
- The sale of land acquired for transport purposes has the potential to materially contribute to project costs. Uplift of ~\$170m is expected from the sale of OSD and residual land sites. Further proceeds and uplift could be capture through additional land sales and land take, albeit additional capital may be required.
- Charging developers must be carefully balanced to ensure it does not disincentivise
 development in the corridor, noting that there is strong economic analysis that
 development charges impact the price developers are willing to pay for the land, rather
 than impacting their appetite to develop.
- It is challenging to hypothecate the direct incremental tax take generated through the project (e.g., GST on construction and rates) or indirect incremental tax take (wider GDP and income tax increases). Nevertheless, recognition of this wider benefit is important to justify a Crown contribution (and reflects the beneficiary analysis).
- Tools used will also need to consider precedent for other mega projects, particularly the
 delivery of light rail infrastructure as part of the Waitematā Harbour Connections project.
 This includes considering the benefits of developing new and innovative funding
 approaches for ALR CC2M, as well as considering the potential 'layering' impact on
 beneficiaries and organisations if similar settings were implemented on the other 'mega'
 projects.
- Implementing the funding solution / tools early is desirable to reduce the upfront capital requirement, maximise the land value uplift that can be captured and reduce the overall funding requirement. However, this needs to be considered in light of construction disruption.

4.9 Overview and evaluation of the funding scenarios

4.9.1 Context and background

A wide range of funding solutions could be implemented to fund the ALR CC2M Project, each of which would have a different impact on the relevant funding organisations and end users.

Commensurate with guidance from Sponsors, beneficiary pays and affordability were front of mind and carefully balanced when developing the scenarios. Approximately 65% of the



benefit is expected to be received by Auckland beneficiaries, particularly those in the local station catchments. This is further supported by the land value uplift expected to be achieved due to the transport intervention. As such careful consideration was given to ways that this contribution could be met given landowner affordability and Auckland Council's financial constraints.

Three 'credible' funding scenarios were taken forward for evaluation which provided a balance of the above. The IFF anchors these three funding scenarios because:

- it can recover costs and capture the 'local' and 'regional' benefits;
- the tool charges landowners without directly impacting Auckland Council's balance sheet;
- the tool allows charges to be spread over the long-term (i.e., 45 years);
- private debt can be used to finance the cashflows;
- as a land tax, the tool has a less distortionary impact that other charges;
- the administration of the levy is highly efficient compared to other tools; and
- because there is the flexibility to design the tool to equitably distribute costs between landowners (i.e., using proximity to stations to set the charges, differential between residential and commercial properties), including addressing affordability through postponement.

While there is precedent for the tool (Tauranga's Transport System Plan and Wellington's Moa Point Sludge Facility), the scale envisaged for ALR CC2M is significantly larger and more complex. Further, the IFF tool is being used for value capture, rather than as a 'cost recovery' tool, which is a step change in its application.

Early market engagement was undertaken to understand the deliverability of the proposed solution, which confirmed that there is strong market appetite for the tool, and that a levy of this scale should be achievable. As part of the detailed design considerations, the potential to finance a portion of the revenue via the Crown was also identified as a potential mitigation to any concerns over implementability (and cost).

All three scenarios also assume a congestion charge is implemented, with a portion of the associated revenues applied as a funding source for ALR CC2M. Under scenarios 1 and 2, the one-third of the revenue is applied to the capital funding for the project. For scenario 3, the revenue is applied to fund Auckland Council's portion of the operating expenditure, up to a maximum of one-third of the congestion charge revenue.

4.9.2 Definition of the funding scenarios

The three funding scenarios were designed to highlight the potential trade-offs of using different tools and settings. The three scenarios are:

- Beneficiary pays with new tools: Focuses on achieving ~66% Auckland contribution to reflect beneficiary pays. This is achieved through setting the IFF levy based on 'Economic' affordability as a % of LVU (rather than cash flow affordability) and implementing a LVUM to recover the additional benefit from local commercial properties. An airport departure charge and congestion charge also form a significant portion of the overall funding package.
- Balanced affordability and beneficiary pays: Focuses on balancing cash flow and economic affordability, particularly for local residential landowners. The IFF revenue is supplemented by new funding tools such as a premium airport charge and congestion charge. The settings of the tools generate the most revenue possible from Auckland within affordability constraints, with the balance of funding met by Crown.
- Outcomes focused: Focuses on incentivising urban development outcomes rather than recovering costs from landowners in the corridor. IFF sized to eliminate the need to other



capex funding tools, thereby, increasing capacity for Auckland Council to fund required urban enabling infrastructure.

Further information is provided on each scenario below.

4.9.3 Overview of the beneficiary pays with new tools scenario

The funding tools and settings applied are summarised in Table 12 below:

Table 12 - Beneficiary pays with new tools scenario: tools and settings - core transport capex

Funding sources: Core transport capex					
Beneficiary	group	Funding tool and settings	Nominal revenue (\$m)	NPV (\$m)	
Landowner	Local	 IFF levy \$1,376 p.a. median levy Totals ~25% of LVU Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$1,490m	\$1,140m	
	Regional	 IFF levy \$113 p.a. median levy Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$1,937m	\$1,482m	
Business owner	Local	 \$911 p.a. median levy Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$758m	\$580m	
	Regional	 \$183 p.a median levy (1.7x multiplier of residential rates as per Auckland Council's differential) Start date: 2026, term: 45 years, inflated by 4% p.a 	\$1,064m	\$814m	
Motor vehic	le user	Set as per The Congestion Question Scheme, i.e., during the peak period, \$3.50 per light vehicle and \$7 per heavy vehicle 1/3rd of available revenue (assumes 2/3rds available for other projects) Start date: 2031, term: 30 years, inflated by 0.5% p.a.	\$5,102m	\$1,290m	
K		Airport departure charge \$12 fare per passenger 1/3 rd available for ALR CC2M Start date: 2024, term: 30 years, inflated by 0.5% p.a.	\$2,257m	\$829m	
General ben	eficiary	Sized to meet the balance of funding and in line with 34% of National benefit	\$6,212m	\$3,622m	



Table 13 - Beneficiary pays with new tools scenario: Tools and settings - Renewals capex

Funding sources: Renewal capex					
Funding source	Settings	Nominal revenue (\$m)	NPV (\$m)		
General rates (Auckland Council)	• 49% of renewal capex	\$2,837	\$177		
NLTF	• 51% of renewal capex	\$2,953	\$184		

Table 14 - Beneficiary pays with new tools scenario: Tools and settings - Opex

Funding sources: Opex		or.	12,
Funding source	Settings	Nominal revenue (\$m)	NPV (\$m)
Standard Farebox	 AFC input – fare consistent with network Start date: 2031 Term: 60 years Inflated at 0.37% p.a. 	\$9,281m	\$711m
General rates (Auckland Council)	49% (after farebox) funded as operating costs are incurred	\$5,954m	\$583m
NLTF	51% (after farebox) funded as operating costs are incurred	\$7,062m	\$699m
Increased parking charges	5% one-off increase in parking charge revenue in 2031	\$146m	\$18m
Commercial revenue	 Revenue from advertising and commercial leasing 	\$684m	\$70m

4.9.4 apital (delivery) funding

This scenario focuses on achieving a ~66% contribution from Auckland (local and regional) to reflect the beneficiary pays principle. Other 'regional' tools are assumed to help achieve this Auckland contribution. The combination of the funding sources and specific settings are provided in Figure 13 below:



Figure 13 - Capital phase funding on an NPV basis (\$m)



IFF is the primary funding tool, which is sized based upon the proportion of benefits derived by residential and non-residential landowners (local and regional). Within station catchments, the levies are sized based on expected land value uplift.

The detailed design settings for the IFF are:

- The local residential component recovers 25% of the estimated land value uplift, leaving significant value for residential landowners;
- The local commercial component is sized to recover 25% of the estimated LVU;
- The regional (Auckland-wide) component is set at \$113, which is approximately a third of the IFF levy rate imposed for Wellington's Moa Point Sludge Facility and substantially below the high-level estimate of \$250 per household for City Rail Link (CRL) being funded out of general rates; and
- A comprehensive postponement scheme is also available to ensure payment can be
 deferred until gains are realised and properties as sold if needed. This is critical to
 managing the affordability of the charge.

The balance of funding is provided by uplift of the sale of land acquired for transport purpose no longer required after construction and user pays.

This scenario assumes that one-third of the forecast revenue from a regional congestion charge is allocated to ALR CC2M. The solution also assumes the tool is implemented in 2031 to align to the expiry of the current Regional Fuel Tax.

An airport departure charge is implemented at \$12 (inflated by 0.5% annually) for 30 years, with a third of the revenue made available for ALR CC2M. Rather than establishing this as a new tool, the expectation is that it would be an extension of the existing International Visitor Levy. Either the Crown or Auckland Council could raise finance against the revenue, however, the costs have been attributed to the Auckland portion.

The balance is expected to be met by a Crown appropriation (sized to reflect the estimated National benefit received). The national benefits primarily relate to the incremental tax take and reduced Crown expenditure thought increased economic activity, health improvements, safety and environmental benefits as well as direct taxation activity from the project including GST on construction costs and the IFF levy.



4.9.5 Lifecycle / renewals funding

Renewals are assumed to be funded and financed through the traditional approach, namely:

- Council funds the depreciation on the asset through general rates;
- Cash timing mismatches are financed through 'core' Council debt; and
- NLTF contribution reflecting the Funding Assistance Ratio (FAR).

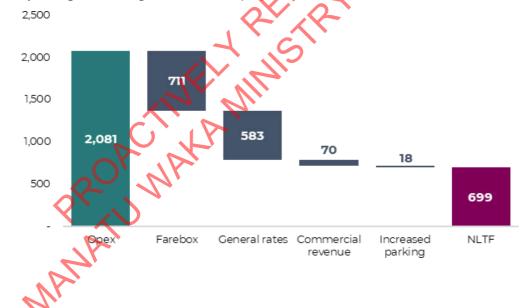
4.9.6 Operating expenditure funding

A traditional public transport operating funding model was identified because of the strong policy rationale to retain the current 'one-network' approach. An integrated 'one network' approach has the following critical advantages over other options:

- simplicity;
- provides a better customer experience;
- promotes a mode-neutral approach;
- minimises the financial impact on the rest of the network; and
- reduces risk to service delivery.

The premium fare and congestion charge revenue, which are included as a capital funding source, could be used to fund operating expenditure to reduce the NLTF and Auckland Council contributions.

Figure 14 - Operating cost funding on an NPV basis (\$m)

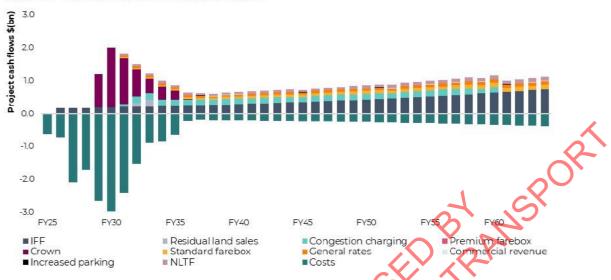




4.9.7 Project cash flows

Figure 15 below shows the profile of cash flows over time.

Figure 15 - Indicative project funding cash flows



4.9.8 Overview of the balanced affordability and beneficiary pays scenario

The funding tools and settings applied are summarised in Table 15 below:

Table 15 - Balanced affordability and pays scenario: tools and settings - core transport capex

Funding sources: Core transport capex					
Beneficiary group		Funding tool and settings	Nominal revenue (\$m)	NPV (\$m)	
Landowner	Local	 IFF levy \$800 p.a. median levy Totals ~20% of LVU and ~0.6% gross household income (1/3rd Shand) Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$1,107m	\$824m	
	Regional	 \$150 p.a. median levy Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$2,565m	\$1,907m	
Purinees	Local	 \$1,917 p.a. median levy (sized to recover ~60% of LVU) Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$1,628m	\$1,210m	
Business owner	Regional	 \$242 p.a. median levy (1.7x multiplier of residential rates as per Auckland Council's differential) Start date: 2026, term: 45 years, inflated by 4% p.a 	\$1,409m	\$1,048m	



Funding sources: Core transport capex				
Beneficiary group	Funding tool and settings	Nominal revenue (\$m)	NPV (\$m)	
Motor vehicle user	Set as per The Congestion Question Scheme, i.e., during the peak period, \$3.50 per light vehicle and \$7 per heavy vehicle 1/3rd of available revenue (assumes 2/3rds available for other projects) Start date: 2031, term: 30 years, inflated by 0.5% p.a.	\$5,102m	\$1,290m	
PT user	Premium farebox • \$12 fare for all passengers boarding and alighting at airport stations. Excludes airport workers • Sized to remain [below/in line] with current airport bus (SkyDrive) • Start date: 2031, term: 60 years, inflated by 0.37% p.a.	\$7,679m	\$533m	
General beneficiary	Crown appropriation Sized to meet the balance of funding and in line with 34% of National benefit	\$6,098m	\$3,525m	

Table 16 - Balanced affordability and pays scenario: Tools and settings - Renewals capex

Funding source	Settings	Nominal revenue (\$m)	NPV (\$m)
General rates (Auckland Council)	49% of renewal capex	\$2,837	\$177
NLTF ZA	51% of renewal capex	\$2,953	\$184



Table 17 - Balanced affordability and pays scenario: Tools and settings - Opex

Funding sources: Opex					
Funding source	Settings	Nominal revenue (\$m)	NPV (\$m)		
Standard Farebox	 AFC input – fare consistent with network Start date: 2031 Term: 60 years Inflated at 0.37% p.a. 	\$9,281m	\$711m		
General rates (Auckland Council)	49% (after farebox) funded as operating costs are incurred	\$5,954m	\$58310		
NLTF	51% (after farebox) funded as operating costs are incurred	\$7,062m	\$699m		
Increased parking charges	5% one-off increase in parking charge revenue in 2031	\$146m	\$18m		
Commercial revenue	Revenue from advertising and commercial leasing	\$684m	\$70m		

4.9.9 Capital (delivery) funding

This scenario largely relies on existing funding sources. It seeks to balance cash flow and economic affordability with beneficiary pays. The combination of the funding sources and specific settings are provided in Figure 16 below:

12,000 10,000 8,000 4,988 172 10,508 1,290 533 2,000 3,525 Capex IFF Residual land Congestion Premium Crown sales charging farebox

Figure 16 - Capital phase funding on an NPV basis (\$m)

IFF is the primary tool expected to recover 47% of total capital costs (~\$5bn). As with the beneficiary pays scenario, the IFF tool is being used for value capture, rather than as a 'cost recovery' tool under this scenario.



The detailed design settings have been carefully crafted to ensure they reflect a fair capture of LVU received but within affordability constraints. Key features of this include:

- The local residential component recovers ~20% of the estimated land value uplift, which has been constrained through a cash affordability overlay (median charge of \$800 p.a. per household), leaving significant value for residential landowners;
- The local commercial component is sized to recover 60% of the estimated LVU thereby capturing just over half of the benefit expected to be realised by transport accessibility (increased activity and footfall). The importance of appropriately recovering funding from business has been highlighted internationally, (e.g., Crossrail in the UK where £4.1bn or ~22% was funded by a business rate supplement¹);
- The regional (Auckland-wide) component is set at \$150 which is less than half the IFF levy rate for Wellington's Moa Point Sludge Facility and below the high-level estimate of \$250 per household for City Rail Link (CRL) being funded out of general rates; and
- A comprehensive postponement scheme is also available to ensure payment can be deferred until gains are realised and properties as sold if needed.

The balance of funding is provided by uplift of the sale of land acquired for transport purpose no longer required after construction and user pays. A congestion charge is also assumed to provide a significant revenue contribution, which is set based on the same settings as under the beneficiary pays scenario.

A premium farebox charge for airport travellers (not workers) provides a material potential revenue source). The premium farebox charge would be comparable to travelling on a current Public Transport alternative (e.g., SkyDrive), as well as international precedent (e.g., the premium charge on the Elizabeth Line (London) for airport travellers). There is also the opportunity to bring in private capital and / or negotiate a capital contribution from major stakeholders (e.g., airport) through a concession arrangement (i.e., where the stakeholder funds the infrastructure in return for the right to charge an additional fee for passengers boarding/alighting at the station).

The balance is expected to be met by a Crown appropriation (sized to reflect the estimated National benefit received, \sim 34%).

4.9.10 Lifecycle / renewals funding

Renewals are assumed to be funded and financed through the traditional approach, namely:

- Council funds the depreciation on the asset through general rates;
- Cash timing mismatches are financed through 'core' Council debt; and
- NLTF contribution reflecting the Funding Assistance Ratio (FAR).

4.9.11 Operating expenditure funding

A traditional public transport operating funding model was identified because of the strong policy rationale to retain the current 'one-network' approach. An integrated 'one network' approach has the following critical advantages over other options:

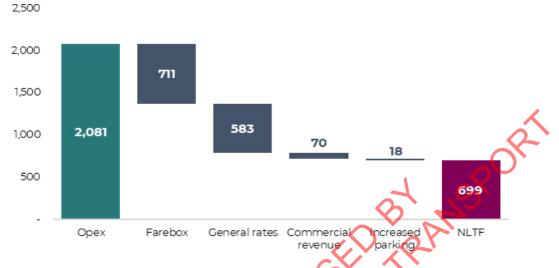
- simplicity:
- provides a better customer experience;
- promotes a mode-neutral approach;
- minimises the financial impact on the rest of the network; and
- reduces risk to service delivery.

¹ National Audit Office, Crossrail – a progress update, July 2021



The premium fare and congestion charge revenue, which are included as a capital funding source, could be used to fund operating expenditure to reduce the NLTF and Auckland Council contributions.

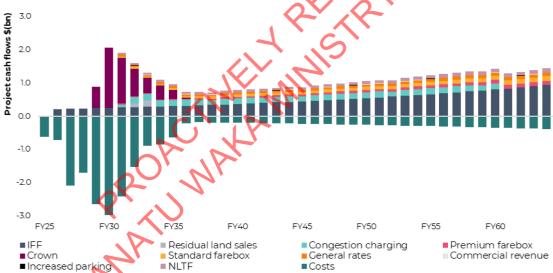
Figure 17 - Operating cost funding on an NPV basis (\$m)



4.9.12 Project cash flows

Figure 18 below shows the profile of cash flows over time.

Figure 18 - Indicative project funding cash flows



4.9.13 Overview of the outcomes focus scenario

The funding tools and settings applied are summarised in Table 18 below:



Table 18 - Outcomes focus scenario: Tools and settings - core transport capex

Funding sources: Core transport capex					
Beneficiary	group	Funding tool and settings	Nominal revenue (\$m)	NPV (\$m)	
Landowner	Local	 IFF levy \$600 p.a. median levy Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$872m	\$613m	
Landowner	Regional	 \$308 p.a. median levy Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$5,281m	\$3,7712m	
Business	Local	 \$1,917 p.a. median levy (sized to recover ~60% of LVU) Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$1,628m	\$1,144m	
owner	Regional	 \$497 p.a. median levy Start date: 2026, term: 45 years, inflated by 4% p.a. 	\$2,901m	\$2,039m	
General ben	eficiary	Sized to meet the balance of funding and in line with 34% of National benefit	\$5,257m	\$2,828m	

Table 19 - Outcomes focus scenario. Tools and settings - Renewals capex

Funding sources: Renewal careex					
Funding source	Settings	Nominal revenue (\$m)	NPV (\$m)		
General rates (Auckland Council)	• 49% of renewal capex	\$2,837	\$177		
NLTF MA	• 51% of renewal capex	\$2,953	\$184		



Table 20 - Preferred funding solution tools and settings - Opex

Funding sources: Opex					
Funding source	Settings	Nominal revenue (\$m)	NPV (\$m)		
Standard Farebox	 AFC input – fare consistent with network Start date: 2031 Term: 60 years Inflated at 0.37% p.a. 	\$9,281m	\$711m		
Congestion charge	Set as per The Congestion Question Scheme, i.e., during the peak period, \$3.50 per light vehicle and \$7 per heavy vehicle Up to 1/3 rd of the revenue drawn to fund Auckland Council's share of opex. Start date: 2031, term: 30 years, inflated by 0.5% p.a.	\$1,991m	\$463m		
General rates (Auckland Council)	49% (after farebox) funded as operating costs are incurred	\$3,947m	\$120m		
NLTF	\$1% (after farebox) funded as operating costs are incurred	\$7,044m	\$697m		
Increased parking charges	5% one-off increase in parking charge revenue in 2031	\$146m	\$18m		
Commercial revenue	Revenue from advertising and commercial leasing	\$684m	\$70m		

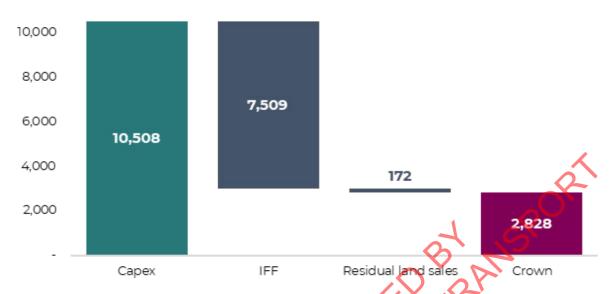
4.9.14 Capital (delivery) funding

This scenario is fully funded through the IFF levy and Crown appropriation.



Figure 19 - Capital phase funding on an NPV basis (\$m)

12,000



This scenario is focussed on incentivising urban development in the corridor rather than an emphasis on beneficiary pays. It seeks to incentivise density and development in the corridor, rather than throughout wider Auckland.

Key funding tools and settings include:

- An IFF levy (\$7.5bn) is used to fund a significant portion of Auckland's overall contribution. It is sized to recover the lower of 0.5% of gross household income or 60% of LVU from local landowners (hybrid of cash flow and economic affordability approach), resulting in a median local residential charge of \$614p.a.
 - o Local non-residential charges are as per scenario 2 (capped at 60% LVU).
 - Regional charges are sized to collect the balance of Auckland-wide benefit (both local and regional), this results in a median regional charge of \$308p.a. (residential) and \$497p.a. (commercial).
- Receipts from the disposal of OSD and residual land are expected to contribute to Project costs.
- No additional 'regional' tools are assumed to be used to ensure Auckland Council retains balance sheet capacity to fund urban enabling infrastructure (airport premium / congestion charge could be used to reduce the cost to regional landowners if required but would likely require Auckland Council financing).

The balance of funding is met by a Crown appropriation and is lower than in either of the other scenarios.

4.9.15 / lifecycle / renewals funding

Renewals are assumed to be funded and financed through the traditional approach, namely:

- Council funds the depreciation on the asset through general rates;
- Cash timing mismatches are financed through 'core' Council debt; and
- NLTF contribution reflecting the Funding Assistance Ratio (FAR).

4.9.16 Operating expenditure funding

Unlike the previous two scenario, the outcomes focus scenario applies congestion charge revenue to reduce Auckland Council's general rates requirement.



Figure 20 - Operating cost funding on an NPV basis (\$m)

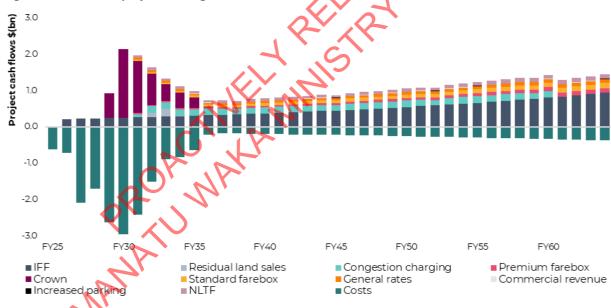




4.9.17 Project cash flows

The figure below shows the profile of cash flows over time.

Figure 21 - Indicative project funding cash flows

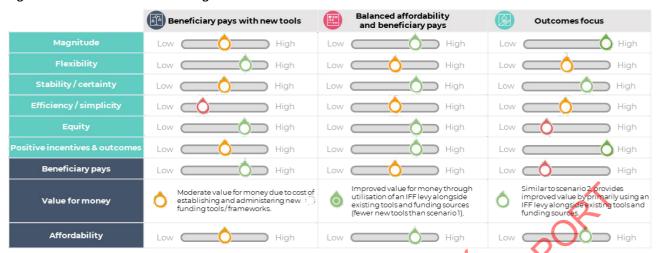


4.9.18 Evaluation of the funding scenarios

The funding scenarios were evaluated against the evaluation criteria outlined in Section 4.4 to highlight the key considerations and potential trade-offs of the different scenarios. The evaluation is summarised in the figure below, with the detailed evaluation and commentary included in the Funding Scenarios Report (Appendix G).



Figure 22 - Evaluation of the funding scenarios



4.10 Financing analysis

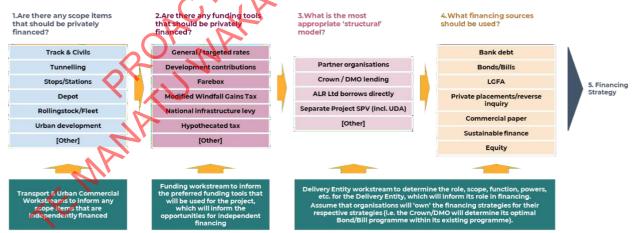
4.10.1 Approach

[Drafting note: this section was drafted prior to the general election in October 2023. The approach reflects guidance from exiting Sponsoring Ministers at the time around appetite for private finance]

The financing analysis built upon the work completed during the IBC, including a more detailed assessment of the structural financing models and opportunities to privately finance certain funding sources; and the development of a preferred financing solution.

The financing solution was developed through the four-step process outlined in Figure 23 below. While presented as a linear process, the financing solution was developed iteratively and collaboratively with the other workstreams as other parts of the CBC were further defined (e.g., funding solution, procurement strategy, etc.).

Figure 23 - Approach to developing the financing strategy



The framework and approach for developing the financing solution was designed to be consistent with the guidance provided by Sponsors, particularly as it pertained to the incorporation and consideration of private finance. Critically, Sponsors Guidance confirmed the project would follow a "Public Service Delivery Model", which excludes the use of delivery models similar to traditional Public-Private-Partnerships, or other models that involve the ownership of the core transport elements.

Sponsors clarified that commercial partnership and private finance opportunities could be considered in certain constrained circumstances (e.g., leases with public agencies and/or



Māori organisations, private financing of specific funding tools such as the Infrastructure Funding & Financing Levy Model (IFF), and commercial models for urban development).

4.10.2 Financing principles and evaluation criteria

To inform the assessments completed at each stage of the process, the following evaluation criteria were applied:

Figure 24 - Evaluation criteria



4.10.3 Privately financing specific scope elements

Specific scope elements were considered for private finance, however, given Sponsors Guidance in relation to private finance, most scope elements were discounted. Should the appetite for private financing (i.e., for the core transport solution) change, the potential options and associated assessments should be revisited.

Table 21 - Opportunities for privately financing individual scope elements

Scope element	Consideration	Assessed further
Civil works (tracks, structures, tunnelling, etc.)	There are a number of precedent PPP projects that have included civil works (particularly tunnelling) with operations and/or maintenance. However, these models are considered to be inconsistent with Sponsors Guidance.	No
Stops/stations	Standalone package Not considered to be deliverable.	No
HAT	Combined with tunnelling/civils Considered to be inconsistent with Sponsors Guidance if packaged with civils.	No
MA	Combined with ISD/OSD Opportunity to enhance value for money.	Yes
Depot	Precedent models in Australia have packaged the depot with the supply of trains and systems, operations and maintenance, which have generally been successful. However, the model is similar to a traditional PPP style contract, which is inconsistent with Sponsors Guidance.	No



Scope element	Consideration	Assessed further
Rollingstock/fleet	While the leasing model has been successful in the UK, Europe and internationally; the lack of a secondary market for the rollingstock in Australia has been less positive. However, the leasing model would provide an opportunity to incorporate private capital, including from Māori/Mana Whenua.	Yes
ISD/OSD	Commercial partnerships and other development models have been used successfully in Australia and more broadly. Considered to be a key opportunity to leverage private capital and potential interest from Māori/Mana Whenua.	Yes

4.10.4 Privately financing specific funding tools

Opportunities for privately financing the shortlisted funding tools were considered through the development of the financing strategy. Given the large quantum of shortlisted funding tools, a three-stage evaluation process was used, which involved.

- · an 'initial screening' of opportunities;
- a qualitative assessment against the funding & financing evaluation criteria; and
- assessment of relevant precedent and wider considerations (e.g., desire to increase the 'toolkit' for future projects).

The evaluation framework is summarised in Figure 25 below.

Figure 25 - Evaluation framework for privately financing specific funding tools



The initial screening exercise was designed to identify funding tools that were unlikely to be appropriate or unable to provide value for money because:

- the funding tool is an existing BAU funding tool (i.e., council rates) that couldn't be efficiently hypothecated;
- the funding tool had material risks that were unquantifiable (e.g., LVUM); and
- the associated revenue was not of a sufficient scale to justify the additional cost and complexity associated with private finance.



The findings from the initial screening exercise are summarised in Table 22 below.

Table 22 - Initial screening of funding tools for private finance

Funding Tool	BAU funding tool	Efficiently hypothe- cated	Quantifiable risk	Sufficient scale	Taken through for assessment?
General rates (Council)					No
Targeted rates, incl. BRS/WPL (Council)					No
Development contribution (Council)					No
Standard Farebox					No
Parking charges				4	O No
Allocation of new build rates				2/2	S No
Targeted rates, incl. BRS/WPL (UDA)				300	Yes
Development contribution (UDA)			N. D.	4	No
IFF levy, incl. BRS			\(\rangle\)) '	Yes
LVUM			アン、		No
Vacant land tax			14		No
Retail/commercial opportunities		7)		No
Advertising					No
Premium Farebox		. W.			Yes
Congestion Charge	C^{\bullet}				Yes
National infrastructure levy	Alpa				Yes
Airport levy	111.				Yes
Hypothecation of a tax (e.g., GST)	2				Yes
NLTF revenue commitment					No
Crown revenue commitment					No
Council révenue commitment					No

Seven funding tools were taken through to be assessed against the evaluation criteria. The evaluations are summarised in Table 23 below.



Table 23 - Evaluation of privately financing specific funding tools

Evaluation criteria	Targeted rates, (UDA)	IFF levy, incl. BRS	Premium Farebox	Conges- tion Charge	National infrastruc -ture levy	Airport levy	Hypothe- cation of a tax (e.g., GST)
Implementation and deliverability							
Value for money							
Alignment to funding & system efficiency					7	c ^Q	08.
Financing capacity & other financial impacts						AM	
Risk transfer				S			
lwi/Mana Whenua participation				V T) .		
ESG considerations			7	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
Conclusion	No	Yes	Consider	Consider	No	No	No

The IFF levy model was identified as a clear opportunity to incorporate private finance, particularly given its ability to achieve an 'off-balance' financing solution for the 'Auckland contribution'. Further detail on the proposed IFF solution is outlined in the following section.

Two other funding tools were identified as being capable of delivering additional value for money through a private financing solution, noting there are some specific trade-offs that would need to be considered (e.g., acceptability of transferring fare pricing control/revenues to a private investor). While not forming part of the 'core' financing solution, both present deliverable private finance solutions that could be progressed. A high-level summary of the proposed model/rationale is summarised below.

4.10.5 Infrastructure Funding & Financing

The Infrastructure Funding and Financing ("IFF") Act was established in 2020 and created a new method of funding and financing new infrastructure projects. IFF enables the legislative establishment of long-term levies paid by those who benefit from the infrastructure and collected by councils on behalf of special purpose vehicles. These special purpose vehicles raise private finance to fund the construction of infrastructure projects, with this private finance repaid by the long-term levies.

Two transactions have been undertaken to date by Tauranga City Council & Wellington City Council, which have successfully utilised the IFF levy revenue to support the establishment



of 30-year levies which in conjunction with private financing will fund a series of infrastructure projects.

The IFF model enables:

- The creation of a long-term fixed revenue stream which is ringfenced for use to fund a specific infrastructure project once established levy revenues can only be used for the specific project set out in the enabling legislation.
- Raising of cost-effective private finance to help deliver the infrastructure required to support urban development.
- Keeping both the long-term levy revenue stream and associated private financing the
 responsibility of the special purpose vehicle and as a result does not impact local council
 balance sheets.

Implementation of an IFF levy requires the development of a levy proposal which is reviewed by the Ministry of Housing and Urban Development, who then prepare a recommendation report for the Minister of Housing. The Minister of Housing then consults with other ministers, with the levy ultimately approved by cabinet. The development of levy proposals is facilitated by Crown Infrastructure Partners (CIP), who also arrange the private finance which supports the levy.

As part of the business case process much of the content of a levy proposal for ALR has been developed, however the development of a fully levy proposal would need to be progressed in conjunction with CIP, the Ministry of Housing and Urban Development and Treasury in advance of the Final Investment Decision.

The preferred funding options include a range of different IFF levy scenarios. For more details on IFF, please refer to Appendix C - IFF

4.10.6 Premium farebox

Privately financing a premium farebox could provide value for money where it was implemented as part of an arrangement with a large stakeholder (e.g., Auckland International Airport Limited). Under this approach, a large stakeholder would either fund the construction of a station or make an upfront capital construction. In return for the contribution, the stakeholder would be granted the right to impose a charge for boarding / alighting at the station and receive the associated revenue.

For the model to work, the large stakeholder would have to assume demand risk at the station and may require pricing control as a mechanism to manage that risk. The expectation is that the only parties potentially interested in this model would be large landowners at / near the station.

Engagement with the few potential interested parties, including AIAL, is the recommended next step to determine whether such a model could be implemented for ALR CC2M.

4.10.7 Congestion charge

Private finance for a congestion charge is likely to only deliver value for money where the technology risk is transferred to the private sector, and the financer is attached to a world-class technology and development partner that can bring innovation and delivery expertise. A simple revenue based private financing model is unlikely to deliver value for money because the private sector is likely to include a significant risk provision in its pricing.

However, there may be an opportunity to consider privately financing the congestion at a future date, once the congestion charge is operational and strong demand has been demonstrated.



4.10.8 Structural financing model options

The structural financing model options are the models used to finance the capital (delivery) costs that are not covered by the IFF or other private financing models considered (i.e., the entity level financing arrangements).

Three structural financing model options were assessed through the development of the financing solution, which are summarised in Table 24 below. Under all of the models, ALR Ltd. is assumed to be the contractual counterparty.

Table 24 - Structural financing options

Structural financing options	Explanation of the model
Option 1: Partner organisations	 ALR Ltd invoices funding partner organisations based on their agreed proportional splits as a direct pass through. Funding partner organisations are responsible for financing their contributions for the project.
Option 2: Crown/DMO lending	 ALR Ltd receives revenues from funding organisations (incl. IFF SPV) as received by the organisation/SPV. ALR Ltd is responsible for financing any cashflow mismatches between the construction payments and the funding flows from organisations/SPVs. ALR Ltd raises finance through a facility with the DMO.
Option 3: ALR Ltd borrows directly	 ALR Ltd receives revenues from funding organisations (incl. IFF SPV) as received by the organisation/SPV. ALR Ltd. is responsible for financing any cashflow mismatches between the construction payments and the funding flows from organisations/SPVs. ALR Ltd raises finance directly from debt capital markets (e.g., bank debt, bonds, etc.).

The high-level evaluation of the three structural models is outlined in Table 25. Based on the initial scoring, it is recommended that Option 3 is not progressed further, which is consistent with Sponsor Guidance.

The decision between Options T and 2 is likely to be a trade-off between pricing/value for money, Partner Organisation support (particularly Auckland Council) and the preference for overall system efficiency.

The extent of independent finance (e.g., IFFA) will also have a material impact on the tradeoffs, particularly the degree of pricing benefit that could be achieved.

Table 25 - Evaluation of structural financing options

Evaluation criteria	Option 1: Partner organisations	Option 2: Crown/DMO lending	Option 3: ALR Ltd borrows directly
Implementation and deliverability			
Value for money			



Evaluation criteria	Option 1: Partner organisations	Option 2: Crown/DMO lending	Option 3: ALR Ltd borrows directly
Alignment to funding & system efficiency		14 	
Financing capacity & other impacts			
Risk transfer			<u>^</u>
lwi/Mana Whenua participation		. 1	CROK
ESG considerations		B	ANS

The three structural options presented in Table 25 above address the financing requirements after privately financed scope elements and funding sources have been removed. Accordingly, the extent to which these are used will have a material impact on the evaluations of the different models:

- Option 1: Partner organisations, Sponsor appetite/'buy-in' will be a critical determinant of the most effective financing strategy. Simple to establish and administrate.
- Option 2: A Crown/DMO financed solution may be more appropriate where the local/regional contribution is primarily financed through the IFF and where minimising financing costs is a primary objective for Sponsors.

Given the quantum of financing expected to be recovered through the IFF and Crown financing contribution, the remaining financing requirement is relatively small. Accordingly, Option 1: Partner Organisations is likely to be the preferred model.

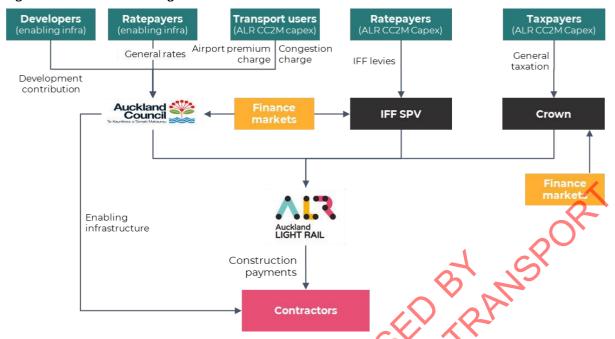
4.10.9 Illustrative financing solution

TE MANA

An illustrative 'hybrid' financing solution is summarised in the figure below, where Crown, IFF and Council finance is all used as part of the overall solution.



Figure 26 - Preferred financing solution



The illustrative financing solution is anchored by the financing raised through a separate IFF SPV, which is assumed to be owned by Crown Infrastructure Partners. The IFF finance is assumed to be drawn first to optimise financing costs. At a contract level, OSD opportunities will be explored, where the station infrastructure is financed and delivered together with the surrounding development.

The Crown and Auckland Council will be responsible for financing the balance, which will be undertaken in proportion to the funding contributions (i.e., the Crown capital contribution, and Auckland Council's premium fare and congestion charge).

Auckland Council would also be responsible for financing the enabling infrastructure costs, using the funding generated from general rates and development contributions charged for the infrastructure to service and amortise the debt.

4.11 Impact assessment

[Drafting Note: The Impact Assessment has been completed based on Scenario 2: Balanced affordability and beneficiary pays to avoid repetition in the Financial Case. It would be updated to reflect the preferred funding solution once confirmed. All the figures and charts for the other two scenarios are included in the Funding Scenarios Report].

4.11.1 Introduction

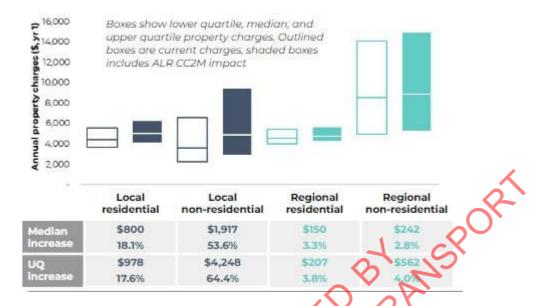
This section outlines the impact of the preferred funding and financing solutions on the relevant organisations and critical beneficiary groups / end users, including landowners at different geographical locations. It draws on the beneficiary and affordability frameworks outlined in Sections 4.5 and 4.6 above, respectively.

4.11.2 Impact on landowners

Figure 27 below summarises the levies / charges on landowners that have been assumed under the preferred funding and financing solutions.



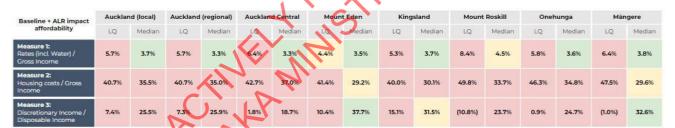
Figure 27 - Overview of preferred funding option local / regional impacts (Transport)



Cash flow affordability

The impact of the preferred funding and financing solutions on landowners against the three cash flow affordability metrics is shown in Figure 28 below. As shown on the charts above, most of the ALR CC2M charges relate to the IFF levy for the transport solution.

Figure 28 - Cash flow affordability measures (Measures 1 to 3)



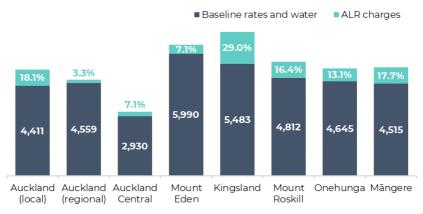
The addition of proposed ALR CO2M charges reduces the amount of available headroom relative to the baseline shown in section 4.6.2. Nevertheless, there is still headroom under the Shand measure for median landowners across the alignment, which reflects the intended impact of the cash flow affordability overlay applied in the preferred funding solution.

One-off impact / increase in charges

The increases to charges are material for the average ratepayer at an average of ~18%, which is significant in the context of historic annual increases in rates (i.e., Auckland Council rates increases have averaged 3.8% over the last ten years). However, it is worth noting that given the potential for ratepayers to postpone their IFF charges, there is the opportunity for households to manage the price-shock.



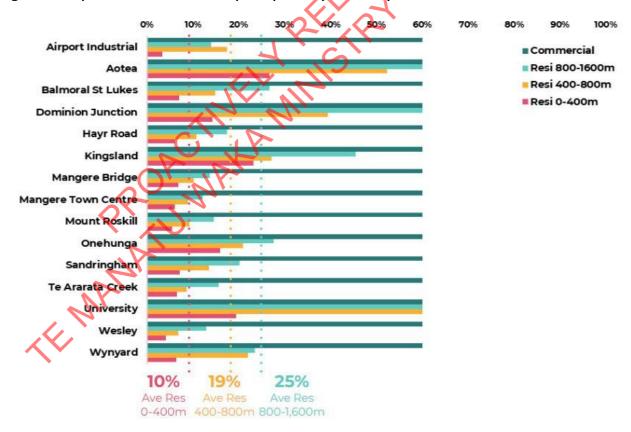
Figure 29 - One-off affordability impact across CC2M suburbs



Economic affordability

The diagram below shows the percentage of expected LVU captured by the IFF levy at each station. It looks at the proportion captured at different distances from the station for residential landowners and also for commercial properties. Given the percentage of LVU captured through the IFF levy is relatively small, there are unlikely to be any affordability challenges from an economic affordability perspective (cost vs monetisation of benefit received).

Figure 30 - Proportion of local land value uplift captured by the IFF levy at each station catchment



LVU has been the focus for the economic affordability analysis for local landowners, because it is the best proxy of the monetised benefits derived by landowners and represents a financial benefit (as opposed to pure economic benefit).



4.11.3 Impact on organisations

[Drafting Note: This section is still a work in progress and does not reflect the latest financial information from Auckland Council. The Section will outline the impact of the preferred transport funding / financing solution on organisational financial position with a focus on Auckland Council impacts].

Charts included to show the following for Auckland Council, Waka Kotahi and the Crown:

- Annual ALR CC2M related cash flow
- Incremental ALR CC2M related debt (cumulative)
- Debt to revenue ratio (Auckland Council only)

4.11.4 Beneficiary alignment

Overall, the preferred funding solution is relatively well aligned to the mid-point of the beneficiary allocation, particularly when considering National and Auckland-wide benefit.

Figure 31 - Mid-point beneficiary allocation vs preferred funding scenario cost allocation



The figures above show that for some categories of beneficiaries there is some misalignment between the proportion of costs allocated between the beneficiary groups and the estimated benefits. However, the funding approach has been designed to ensure that there is no beneficiary group that is allocated more cost than their estimated benefits. The diagrams below show the dollar value of benefits (per economic analysis) compared to the dollar value of costs funded by each beneficiary group. Given the BCR is greater than 1.0 all beneficiary groups pay less than the benefit they receive.

Figure 32 - Benefits captured by allocated funding - Beneficiary groups

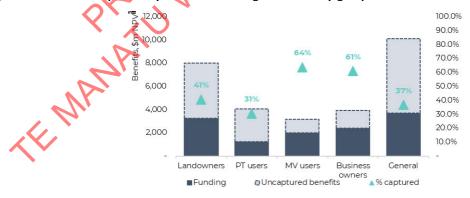
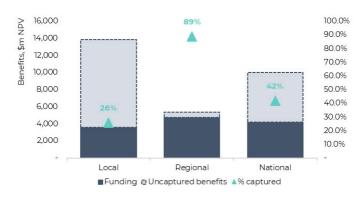




Figure 33 - Benefits captured by allocated funding - Beneficiary geographies



4.11.5 Overall conclusions

[Drafting Note: These will be updated and added to as part of the next iteration]

- The overall Auckland and National allocation is consistent with the mid-point of the analysis. The variance in regional / local split reflects the rebalancing of the IFF with reduced local charge and increased regional change. To fully recover the charge from local beneficiaries the median local IFF charge would need to be \$4,881 and regional \$113 p.a.. This highlights the material impact a small incremental amount at a regional level can do to the total funding quantum.
- The proportion of costs recovered from landowners is in line with benefit received and represents ~40% of total economic benefit received. This is higher for business owners (~60% of economic benefit received) reflecting the higher commercial charge.
- Inclusion of the premium farebox allows recovery from PT users without increasing the base fares and disincentivising ridership.
- Motor Vehicle benefits are captured via the congestion charge and NLTF funding (under current NLTF revenue sources).

....ing.rider
....e benefits are captured vicurrent NLTF revenue sources).



5. Funding and Financing Urban

5.1 Urban enabling infrastructure

5.1.1 Status quo funding

Enabling infrastructure covers a broad range of 'traditional' infrastructure and community infrastructure / public realm & amenity.

The starting point for urban enabling infrastructure is that the default responsible agency funds, delivers and operates the infrastructure. Table 26 below summarises the status quo funding arrangements for the urban enabling infrastructure categories identified as part of the Urban Optioneering work.

Table 26 - Status quo funding and financing arrangements

Cost category	Status quo funding and financing arrangements
Water	 Funded by Watercare (a 100% owned subsidiary of Auckland Council) primarily through a mixture of variable water charges and infrastructure growth charges. Growth and level of service capital works are typically financed. Watercare borrows through Auckland Council. If Affordable Water Reform progresses, investment costs and recovery of these would become the responsibility of the new Water Services Entity (WSE).
Wastewater	As above.
Stormwater	 Funded and financed by Auckland Council. Primarily funded through development contributions and general rates. Some targeted rate revenue through the Water Quality Targeted Pate Would also become the responsibility of the WSE if reform goes ahead.
Power	• Vector.
Green infrastructure	Funded and financed by Auckland Council. Development contributions and general rates are the primary funding tools used.
Social infrastructure	 Education and Health Infrastructure (Crown) Funded and financed by the relevant Crown organisation via a Crown appropriation through the respective Ministry. General taxation revenue is the primary funding tool.
	 Community Facilities (Auckland Council) Funded and financed by Auckland Council. Development contributions and general rates are the primary funding tools used. Some fees and charges are also applied for certain services.



Cost category	Status quo funding and financing arrangements
Transport	 Generally co-funded between Auckland Transport (via Auckland Council) and the NLTF based on the 51% FAR rate. Primarily general rates and development contribution funded (Auckland Council) and Fuel Excise Duty / Road User Charges (NLTF).

Analysis undertaken as part of the Urban Optioneering Work has identified potential urban enabling infrastructure requirements to support growth in the corridor. The estimation approach assessed network capacity and benchmarked enabling infrastructure costs per household of additional growth, rather than identifying and costing specific investments. Accordingly, the costs cannot, at this stage, be compared to existing investment / capital plans to identify the incremental cost associated with enabling infrastructure. This will need to be considered further in the urban DBCs.

[Drafting note: will be complete in the next version of the financial case with more detailed consideration at the DBC stage for each key development area].

5.1.2 Financing

[Drafting note: will be complete in the next version of the financial case with more detailed consideration at the DBC stage for each key development area].

5.1.3 Impact

[Drafting note: will be complete in the next version of the financial case with more detailed consideration at the DBC stage for each key development area].

5.2 Urban interventions

5.2.1 Approach

[Drafting note: will be complete in the next version of the financial case with more detailed consideration at the DBC stage for each key development area].

[Both of these areas are explored in the Urban Commercial Case].

5.2.2 Principles and considerations

[Drafting note: will be complete in the next version of the financial case with more detailed consideration at the DBC stage for each key development area].

5.2.3 Funding

[Drafting note: will be complete in the next version of the financial case with more detailed consideration at the DBC stage for each key development area].

5.2.4 Financing

This section will cover financing considerations to deliver urban interventions.

5.2.5 / Impact

Consider if proposed funding and financing has any impact on beneficiaries / funding organisations.



6. Overall affordability

[Drafting note: will be complete in the next version of the financial case with more detailed consideration at the DBC stage for each key development area. As with the impact assessment, this has been completed based on the balanced affordability and beneficiary pays scenario].

6.1 Ratepayer affordability

Ensuring the project's funding arrangements are affordable for all beneficiary groups is critical to achieving the social license for the project.

[This section will contain the cumulative ratepayer affordability impacts for transport and urban charges for each of the key ratepayer affordability measures and will differentiate between a ratepayer in an existing home and a ratepayer purchasing a new home (paying a development contribution for urban enabling infrastructure)].

[Drafting note: Appendix G – Funding Scenarios Report provides indicative cost to developers and ratepayers of incremental enabling infrastructure required to enable the Urban Minimal Investment and Urban Active Investment scenarios. Given uncertainty around the extent to which these may or may already be included in funding agency/entity plans, this has not (at this point) been overlaid to transport funding costs. For context this analysis shows that costs could be in the region of \$3k in development contributions in the corridor and \$8 p.a. of general rates across Auckland for the Urban Minimal Investment Option requirements if 50% of the cost is deemed to be growth related)].

Figure 34 - Overall ratepayer affordability including ALR CC2M transport and urban costs

	dand	Aucklar	d Central	Moun	t Eden	King	sland	Mount	Roskill	Onet	nunga	Mān	gere
LQ	Median	LQ	Median	10	Median	LQ	Median	LQ	Median	LQ	Median	L/Q	Median
5.0%	3.0%	5.6%	2.8%	3.8%	3,7%	3.5%	2.7%	6.6%	3.6%	4.6%	2.9%	4.9%	3.0%
40.3%	35.0%	42.376	36.8%	413%	28.5%	1675	29.2%	48.1%	32.9%	45.4%	34.4%	46.2%	28.9%
7.1%	25.3%	1.546	18.3%	10.2%	37.5%	16.3%	32.0%	(9.9%)	24.0%	1.7%	24.6%	(0.3%)	32.9%
4	5.0%	5.0% 3.0%	5.0% 3.0% 5.6% 40.3% 35.0% 42.3%	5.0% 3.0% 5.6% 2.8% 40.3% 35.0% 42.3% 36.8%	5.0% 3.0% 5.6% 2.8% 3.8% 40.3% 35.0% 42.3% 36.8% 45.7%	5.0% 3.0% 5.6% 2.8% 3.8% 3.9% 40.3% 35.0% 42.3% 36.8% 41.7% 2P.5 4	5.0% 3.0% 5.6% 2.8% 3.8% 3.8% 3.5% 40.3% 35.0% 42.3% 36.8% 41.3% 28.5% 46.7%	5.0% 3.0% 5.6% 2.8% 3.8% 3.7% 3.5% 2.7% 40.3% 35.0% 42.3% 36.8% 41.7% 28.5% 16.75 29.2%	5.0% 3.0% 5.6% 2.8% 3.8% 3.7% 3.5% 2.7% 6.6% 40.3% 35.0% 42.3% 36.8% 40.7% 28.5% 16.7% 29.2% 48.1%	5.0% 3.0% 5.6% 2.8% 3.8% 3.7% 3.5% 2.7% 6.6% 3.6% 40.3% 35.0% 42.3% 36.8% 40.7% 28.5% 46.7% 29.5% 48.1% 32.9%	5.0% 3.0% 5.6% 2.8% 3.8% 37% 3.5% 2.7% 6.6% 3.6% 4.6% 4.6% 4.6% 35.0% 42.3% 36.8% 417% 28.5% 16.75 29.2% 48.1% 32.9% 45.4%	5.0% 3.0% 5.6% 2.8% 3.8% 37% 3.5% 2.7% 6.6% 3.6% 4.6% 2.9% 40.3% 35.0% 42.3% 36.8% 417% 28.5% 76.75 23.2% 48.1% 32.9% 45.4% 34.4%	5.0% 3.0% 5.6% 2.8% 3.8% 3.1% 3.5% 2.7% 6.6% 3.6% 4.6% 2.9% 4.9% 4.9% 4.03% 35.0% 42.3% 36.8% 41.7% 28.5% 16.75 29.2% 48.1% 32.9% 45.4% 34.4% 46.2%

[The chart below will show one-off affordability impacts for transport only and including urban enabling infrastructure (funded via general rates / development contributions)].



Figure 35 - Overall ratepayer one-off affordability including ALR CC2M transport and urban costs



[Ratepayer affordability impacts will also be summarised against economic affordability measures, and for regional ratepayers, and by each of the personas].

6.2 Organisational affordability

[Drafting note: This section will show the overall impact of transport and urban funding on key Auckland Council affordability metrics].

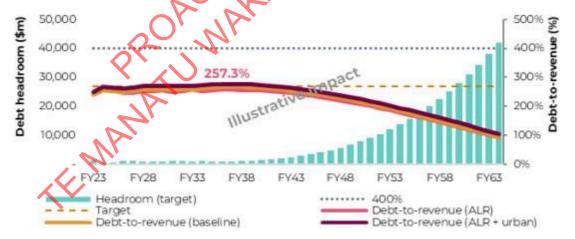
[Note: information below is for illustrative purpose. All information developed within the ALR project as no information provided by Auckland Council. To further consider if inclusion of the below is appropriate or alternative measures included].

Charts included to show the following for Auckland Council, Waka Kotahi and the Crown:

- Annual ALR CC2M related cash flow
- Incremental ALR CC2M related debt (cumulative)
- Debt to revenue ratio (Auckland Council only)

[Consider included charts such as the below]

Figure 36 - Auckland Council ALR CC2M transport and urban affordability vs. baseline (illustrative)



[Information will be summarised in table format also - information is illustrative and developed within the ALR project as no information provided by Auckland Council].



Table 27 - Auckland Council debt headroom including ALR CC2M transport and urban (illustrative)

Debt to revenue headroom (\$m)	FY24	FY25	FY26	FY27	FY28
Headroom (limit)	1,357.4	1,533.1	1,984.9	2,044.7	1,806.8
Headroom (target)	534.8	675.9	1,074.6	1,090.5	824.8
Headroom (ALR transport)	xx	XX	xx	xx	xx
Headroom (ALR transport + urban)	xx	xx	xx	xx	xx
Drafting Note: The total affords summarised, including transposed and the second secon	ort and urbar				on will be



7. Sensitivities and scenario analysis

[Drafting note: This section will summarise the different sensitivity analysis / scenarios that were modelled, e.g. higher interest rates, lower demand, etc. It will be completed in the next version of the financial case].

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Project contingencies

[Drafting note: will be complete in the next version of the financial case].

- Outline the approach to agency(ies) and beneficiary(ies) who will fund any contingencies associated with the project. This could include cost contingency outside of the allowance made in cost estimates or a revenue shortfall.

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Next steps

Drafting Note: This section will provide a summary of key next steps from a funding and financing perspective.]

- Decisions / actions required pre-FID (e.g., funding agreements)

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Appendix A Technical cost appendix



Appendix B Beneficiary analysis

[Drafting note: Draft report issued 30/05/2023. To be updated with final costs and benefits in and issued with the final version of the Financial Case



Appendix C IFF

[Drafting note: Draft report issued 30/05/2023. To be updated with final costs and benefits and issued with the final version of the Financial Case



Appendix D LVUM

[Drafting note: Draft report issued 30/05/2023. To be updated with final costs and issued with the final version of the Financial Case



Appendix E Affordability analysis

[Drafting note: Draft report issued in two volumes (09/05/2023 and 17/05/2023 for volume 1 and 2, respectively. To be updated with final analysis and issued with the final version of the Financial Case]

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Appendix F Funding tool evaluation

[Drafting note: Evaluation complete (RAG), supporting report WIP (~70%). To be finalised and issued with the final version of the Financial Case].

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Appendix G Funding Scenarios Report

[Drafting note: Draft report issued in November 2023 based on costs and benefits reflected in the Economic Case [30 October 2023] version. The final version of the Financial Case]



Appendix H Financing

[Drafting note: Draft report (Financing Methodology & Analysis) issued 04/07/2023. To be updated with final costs and benefits and issued with the final version of the Financial Case]

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Appendix I Model assumptions