

Memorandum

To: Richard Morris, Chief Financial Officer
Cc: Nicki Lucas, Revenue and Analysis Manager
Stuart McDougall, RLTP Manager
From: Veraina Tanielu, Funding Engineer
Date: 17th April 2015
Subject: **2012-15 Beach Road Cycle Highway – Stage 2 Construction funding**

Executive Summary

- 1 The Beach Road walking and cycling project is a flagship cycling project that forms an important link in Auckland's first two-way dedicated cycleway, which is physically separated from traffic. It connects to the Grafton Gully cycleway and cycle routes on Tamaki Drive and Quay Street. Together these two projects form a continuous, safe and convenient route for cyclists to access the city centre. The project also includes safety improvements at intersections and landscaping to make the route more visually attractive.
- 2 Financial assistance for the design phase of the project was approved by the New Zealand Transport Agency (the Transport Agency) in May 2014 and Stage 1 construction was approved in October 2014. The Stage 1 segment of the Beach Road cycleway between Churchill St and Mahuhu Crescent is complete and Stage 2 will complete the remainder of this cycle metro route up to Britomart Place.
- 3 Auckland Council has incorporated streetscape works into the Stage 2 construction component of this cycleway and these streetscape works are not eligible for Transport Agency funding.

Purpose

- 4 The purpose of this memo is to seek your approval to:
 - a. provide investment funding for Stage 2 construction of the 2012-15 Beach Road Cycle Highway project. This stage will complete the remainder of the cycleway length which consists of approximately 500m of separated cycleway on the Beach Road footpath between Mahuhu Crescent and Britomart Place.
 - b. submit an application to the Transport Agency for funding assistance.

Recommendations

- 5 That the Chief Financial Officer:
 - a. **notes** that the 2012-15 Beach Road Cycle Highway is made up of two construction stages that are estimated to cost \$6.13 million. Stage 1 is complete and cost \$2.54 million. Stage 2 is estimated to cost \$3.59 million and is the subject of this funding application;
 - b. **confirms** funding for the Stage 2 component of 2012-15 Beach Road Cycle Highway which is estimated to be \$3.59 million. Auckland Council streetscape works which have been incorporated into Stage 2 will cost \$2.21 million and are not eligible for Transport Agency funding. The **remaining \$1.38 million being \$649,000 (47%) Auckland Transport (AT) share and \$731,000 (53%) Transport Agency share;**

c. **notes** that the reasons for this decision are set out in Attachment 1, and that using the Transport Agency profiling assessment for this project, the profile has been assessed as **HHL** giving Transport Agency funding priority class of 3, and confirms that sufficient Auckland Transport funding is available for this project.

Strategic context

- 6 The Auckland Council City Centre Masterplan 2012 has set a vision and outcomes that aim to change active mode access to the CBD from the current 8% to 20% by 2041. The project supports the vision of the plan by delivering on outcome seven, target two 'More kilometres of cycleway'.
- 7 The proposed cycleway is in the City Centre, a geographic spatial priority in Auckland Council's draft Long Term Plan 2015-25. Spatial priorities have been developed to target investment into those areas with a "key focus on infrastructure requirements, optimising and completing existing investment and stimulating economic development".
- 8 The Beach Road Cycle Highway is classified as a cycle metro on the Auckland Cycle Network (ACN) which is akin to an arterial in a road classification. The ACN is a part of the Transport Agency supported Integrated Transport Programme (ITP) 2012 - 2041. Prioritisation of the ACN resulted in this project being assigned a priority rating of 'high' for implementation within the next 5 years.
- 9 The Beach Road Cycle Highway is on a strategically important route in the ACN. The project joins the Transport Agency's recently completed Grafton Gully Cycleway and North Western Cycleway to the inner CBD, completing a strategic link to the Britomart transport interchange and downtown ferry services. Additionally, it provides the connection of the Northwestern Cycleway to the Tamaki Drive Cycleway (via Quay St), providing a safe cycle route from west to east and vice versa.

Outcomes sought from investment

- 10 Provide infrastructure that contributes to the completion of the ACN: This stage implements 500m of the Beach Road cycleway and will complete 1.3 km of a metro route on the ACN to allow for better connectivity.
- 11 Increase cycling uptake: The proposed cycleway is on a strategic route on the ACN and will help promote cycle demand through the provision of a safe dedicated cycle facility. Temporary cycle counters installed a month after the completion of the Stage 1 segment showed that on average, 235 cycle trips were made on Beach Road with the highest recorded trips being 336.
- 12 Increase cyclist and pedestrian safety: There were 6 crashes involving cyclists in the five year period 2006-11 on Beach Road. Of these reported crashes all occurred at or near intersections. This project will result in an improved level of safety for all road users through the improvement of intersections along Beach Road as well as the completed construction of a 3.0m wide dedicated cycle facility, reducing conflicts between cyclists and other transport modes. The majority of the Stage 2 segment will be separated from the pedestrian traffic within the footpath.
- 13 Provide a more integrated transport network: The proposed route is a key connection for other major cycleways into the inner CBD and provides a safe continuous route to key interchanges such as Britomart and the downtown ferry building.

Funding Availability

- 14 The proposed project forms part of a group of activities listed as “2012-15 Cycleway Development & Construction” in the 2012-15 NLTP. Auckland Transport has prioritised 2012-15 Beach Road Cycle Highway project as a high priority within this activity group and there is Transport Agency subsidy available for this activity (Refer Attachment 6). This project is part of a group of activities listed as “Cycleway Development and construction (Regional Cycling and Walking Plan)” in the 2012-15 Regional Land Transport Programme (RLTP, page 54).
- 15 Auckland Council’s published 2014/2015 Annual Plan allocates \$2.05m to this project (page 190). This is not sufficient to cover the amount expended to date and planned for this stage. We have however confirmed that the current approved version of the 2014/15 revised capital programme does allocate sufficient funds (\$4.9 million) to cover the cost of this project.
- 16 Extensive consultation was undertaken on this project during the investigation and design phases. This has resulted in a number of scheme improvements. The major changes made are summarised on the Auckland Transport project web site key design decisions.

Key issues

- 17 An incremental assessment of the options is now expected of all funding applications, but has not been undertaken for this project. At the design phase of this project, justification was provided to the Transport Agency showing that incremental analysis was unnecessary. The Transport Agency assessor of the funding application was satisfied that option selection using a multi criteria analysis was sufficient and selection of the preferred option was justified.
- 18 There will be extensive improvements to the footpath between Mahuhu Crescent and Britomart Place which would garner high pedestrian benefits, however these benefits have been excluded from the economics as the project is primarily a cycling infrastructure project with secondary pedestrian improvements. Therefore the benefits calculated in the economics are considered conservative.
- 19 Vector is undertaking works within the Stage 2 area to future-proof underground cabling prior to the start of the cycleway and streetscape works – this will limit renewals difficulties at a later date. Delays to cabling works have a knock on effect on the completion of the Stage 2 works by the end of June.

Full procedure economics vs. simplified procedures economics

- 20 The advice from the Transport Agency regional office for both the approved design phase and Stage 1 construction phase funding applications was that simplified procedures economics was satisfactory for the Beach Road Cycle Highway.
- 21 A national office Transport Agency Post Approval Review (PAR) on the Stage 1 section of the Beach Road cycleway was received on the 2nd April 2015. This PAR has recommended that full procedures economics could have been used for this scheme to determine the travel time disbenefits to vehicles, from the modified traffic signal phases. The cycle phase has been incorporated into the existing pedestrian phase so there is likely a minimal impact on the throughput of vehicles.
- 22 The recommendation from the PAR for full procedure economics will be considered for future cycling projects where there is a potential travel time disbenefit for vehicles. The simplified procedures have been satisfactory for both the design and Stage 1 construction phases which have been implemented and there is likely a minimal impact on disbenefits to vehicles. Therefore, simplified procedures should be satisfactory for the Stage 2 construction funding application to maintain consistency.

Assessment and conclusions

- 23 Using the Transport Agency assessment criteria, the funding profile for the 2012-15 Beach Road Cycleway project is **HHL** which results in a funding priority 3. It is therefore recommended that the Chief Financial Officer approves the Auckland Transport share of construction funding for this application, and approves the submission of a funding application to the Transport Agency seeking financial assistance.

Attachments

- 24 There are seven attachments to this paper:

Attachment 1:	Reasons for recommendation
Attachment 2:	Location map
Attachment 3:	Auckland Cycle Network map
Attachment 4:	Assessment
Attachment 5:	Table from the NLTP in TIO showing that sufficient funds are available
Attachment 6:	Typical cross section
Attachment 7:	Concept picture of the streetscape works after Stage 2 completion

Recommendation and approval

Recommended for submitting to the Transport Agency for funding subsidy:



Stuart McDougall - RLTP Manager

20/4/2015

Date



Nicki Lucas – Revenue and Analysis Manager

20/4/15

Date

Approve for submission to the Transport Agency for funding subsidy:



Richard Morris – Chief Financial Officer

21 Apr 2015

Date

Reasons for recommendation

The assessment profile for this project using the Transport Agency's assessment criteria results in a rating of **High** for strategic fit, **High** for effectiveness and a **Low** for economic efficiency.

This project is aligned with Auckland Transport's Integrated Transport Programme 2012–2041, contributes to the Transport Agency's assessment framework, which is intended to give effect to the Government Policy Statement 2015, and contributes to the objectives of the Land Transport Management Act by:

- a. Provision of a key connection on a strategically significant route within the an agreed walking & cycling strategic network to help alleviate congestion within a major urban area; and
- b. Assisting in safety and personal security via the construction of a dedicated cycleway facility

It is confirmed that

- the matters in section 20 (2) of the LTMA which relates to the capability of the project to meet suitability assessments, has been satisfied, and
- section 20 (3) of the LTMA which relates to taking into account national strategies and policies, has also been considered.

Released under the Official Information Act 1982

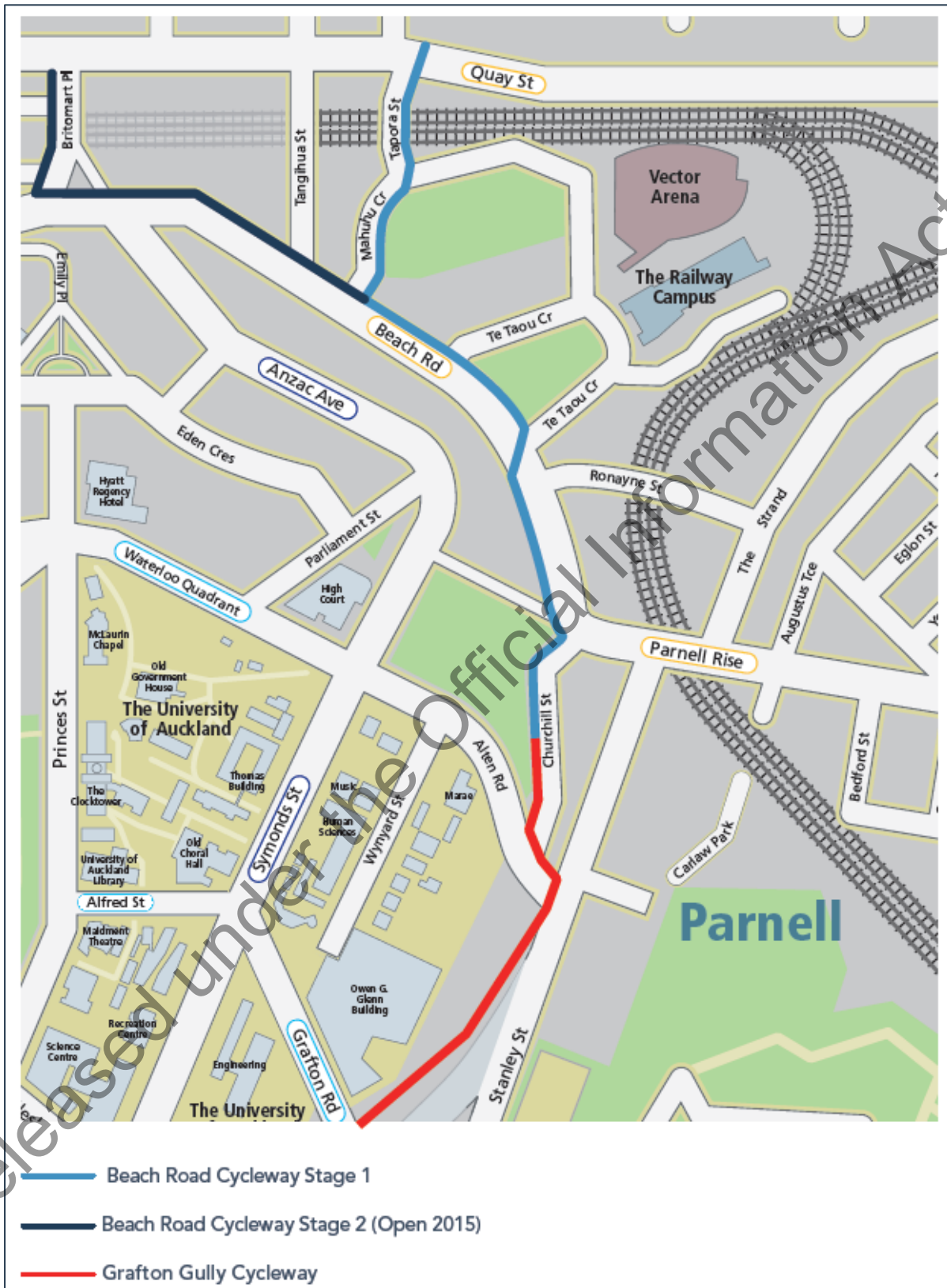


Figure 1: Map showing the Grafton Gully cycleway and the connection to the proposed cycleway. Stage 1 was completed in September 2014 and Stage 2 will be completed by July 2015.

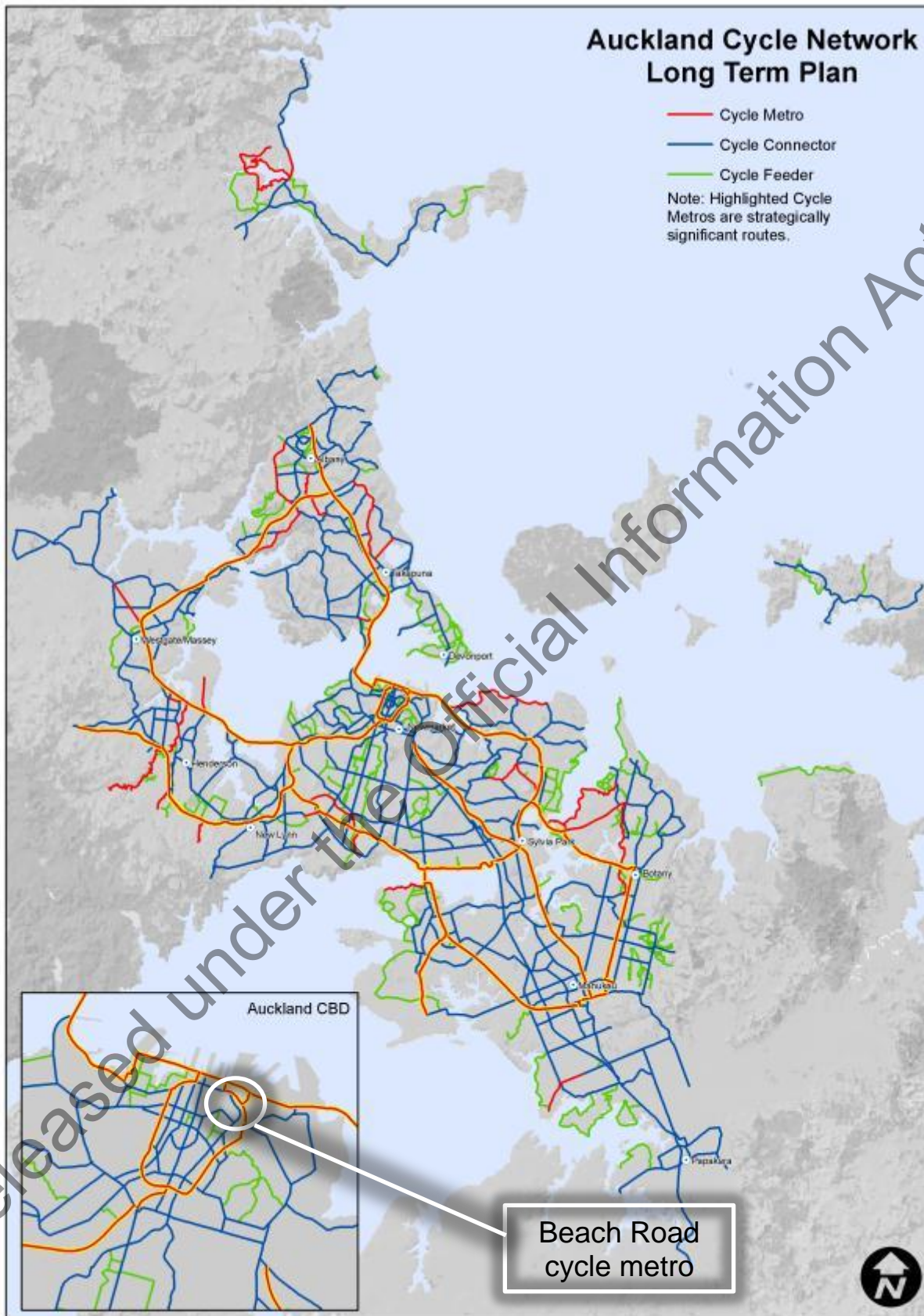


Figure 2: Map of the Auckland Cycle Network with the proposed cycleway circled showing that it is a Cycle Metro and lies on a strategically significant route.

Application details and responsibilities	
Type	Stage 2 Construction funding
Name of activity	2012-15 Beach Road Cycle Highway
Assessor's name	Veraina Tanielu (Funding Engineer)
Auditor's name	Tim Mueller (Principal Evaluation Engineer)
Organisation contact	Matthew Ah Mu (Project Manager) Veraina Tanielu (Funding Engineer)
Background	
Description	This project involves the construction of the second stage (0.5 km) of a dedicated cycle facility along Beach Road within the footpath. The total length is approximately 1.3 km, with the majority of the cycleway being an off-road facility. The cycleway along Beach Road connects the Transport Agency's Grafton Gully Cycleway to the heart of the CBD, Quay St, Britomart transport interchange and the downtown ferry services.
Previous funding applications	A design phase funding application was approved by the Transport Agency in May 2014 and a retrospective Stage 1 construction funding application was approved in October 2014 – both the design and Stage 1 construction phases have been fully claimed.
Conditions of funding	No conditions of funding were applied to the design and Stage 1 construction phases.
Policy	The assessment of this project is based on the Transport Agency's assessment framework and Auckland Transport's assessment policy. For the purpose of seeking Transport Agency funding, the Transport Agency assessment profile policy has been used in this application. The project is part of the Auckland Cycle Network, ranks 'high' in priority order in the list of projects and has been prioritised for implementation in 2012/15.

Strategy support/ package endorsement	This project is prioritised for early implementation in the ACN, which is part of the Auckland Integrated Transport Programme (ITP) 2012–2041, a strategy supported by the Transport Agency.
Issue definition	<p>Access to and from the central business district and in particular to the Britomart transport interchange and waterfront by cycle is very difficult and unsafe. Limited road space, high congestion and large pedestrian volumes all contribute to a very poor level of service for active travel options by cycle.</p> <p>There were previously no dedicated cycle facilities along Beach Road. Additionally there were no cycle facilities that could link the current cycle facilities on Quay St to the Grafton Gully Cycleway (GGC) or link the GGC to the major public transport hub at Britomart.</p>
Strategic context and regional perspective	This project contributes to the objectives of the Government Policy Statement (GPS) 2015, the Auckland Plan in achieving a multi-modal transport network, Auckland's Integrated Transport Programme 2012-2041 and the implementation of the ACN.
Objective	<p>The objectives of this key connection on the ACN are to:</p> <ul style="list-style-type: none"> • provide infrastructure that contributes to the completion of the ACN, leveraging off existing walking and cycling investment; • increase cycling uptake; • increased cyclist and pedestrian safety with the construction of a separated cycle facility, and • provide a more integrated transport network.
Alternatives and options	<p>Seven options were identified and assessed using a 'multicriteria analysis'. An Option F was the preferred and adopted option because it provides:</p> <ul style="list-style-type: none"> - a high quality cycleway offering the highest level of service, and; - improving pedestrian and cyclist safety within the corridor. <p>The other options considered can be found in the SAR which has been uploaded to TIO.</p>
Scope of activity under funding request	<p>This funding application is for Stage 2 construction of the '2012-15 Beach Road Cycle Highway'.</p> <p>Stage 2 consists of the construction of the remaining 500m of the cycleway and extensive footpath amenity improvements in the northern footpath section on Beach Road between Mahuhu Crescent and Britomart Place. The majority of the cycleway being implemented in Stage 2 is separated from pedestrian traffic.</p>
Form, function and standards	The design of the proposed cycleway conforms to relevant local design standards, the Transport Agency design standards and Austroads design guidelines. They are considered to be appropriate for the proposed project.
Levels of service	<p>This project provides a high but appropriate level of service considering its location and connections. Most of the project length consists of a separated cycle facility which conforms to the minimum width, alignment, gradient and safety requirements.</p> <p>Stage 1 of this facility has incorporated a greater use of narrow raised kerb separators between the two way cycle paths and live traffic lanes. This will help</p>

	<p>raise the safety level of service and the project's effectiveness.</p> <p>Additionally, the Stage 2 section will raise the existing level of service for pedestrians through the extensive footpath improvements adjacent to the cycleway.</p>
Readiness for funding/assessment	
Readiness for funding this phase	<p>Ready</p> <ul style="list-style-type: none"> • all phases of this project are included within the current NLTP as part of the '2012-15 Cycleway Development & Construction' programme; • the project is listed in Auckland Council's Annual Plan 2014/2015 (page 190) and in the 2012-15 RLTP (page 54); • all S16 and s20 requirements have been addressed, and • this construction stage is intended to begin in late April 2015.
The Transport Agency Assessment framework	
Strategic fit	<p>High</p> <p>The 2012-15 Beach Road Cycle Highway:</p> <ul style="list-style-type: none"> • supports the vision of the City Centre Masterplan 2012 to deliver 'More kilometres of cycleway'; • is within the City Centre which is a geographic spatial priority (areas developed to target infrastructure investment) in Auckland Councils draft Long Term Plan 2015-25; • delivers a high level of service cycle facility on a cycle metro within the ACN, a Transport Agency supported cycling strategic network, for easing congestion in a major urban area; • contributes to a reduction in crash risk to cyclists and pedestrians (in accordance with Safer Journeys 2020). The proposed route is a dedicated cycle facility with physical delineation from pedestrians and vehicles, and • connects the Transport Agency's proposed Grafton Gully Cycleway and subsequently the North Western Cycleway to the inner CBD, the Britomart interchange and downtown ferry building.
Effectiveness	<p>High</p> <p>The 2012-15 Beach Road Cycle Highway:</p> <ul style="list-style-type: none"> • is significantly effective in delivering the potential identified in the 'strategic fit' criteria since the cycle facility is a dedicated cycleway on a strategically significant route; • provides infrastructure that contributes to the completion of the ACN. This allows for better connectivity to the ACN and connectivity within the cycle network; • has been assessed as a 'High' priority for projects to be constructed within the next 5 years in the ACN implementation programme (AT's internal prioritisation list); • contributes to a more integrated transport network. The route is a key connection for other major cycleways (such as Grafton Gully Cycleway and Tamaki Drive Cycleway) to key transport interchanges such as the Britomart and

Released under the Official Information Act 1982

	<p>downtown ferry building, and</p> <ul style="list-style-type: none"> • this activity meets all the objectives of the GPS 2015 for land transport listed below: <ul style="list-style-type: none"> - addresses current and future demand for access to economic and social opportunities - provides appropriate transport choices - is resilient - is a safe system, increasingly free of death and serious injury - mitigates the effects of land transport on the environment - delivers the right infrastructure and services to the right level at the best cost.
--	--

Efficiency	<p>Low</p> <ul style="list-style-type: none"> • the project has a BCR of 1.9 resulting in a 'Low' rating; • the economic evaluation has been updated for the Stage 2 construction phase to reflect the amended costs; • the calculation of the BCR is done on the whole cost of the project rather than the removal of the sunk costs for Stage 1; • the total project cost used in the economics is greater than the cost being submitted for financial assistance. This is because some of the total project cost includes work that does not qualify for financial assistance (i.e. footpath renewals and uplighting, planter boxes, street and footpath light replacements); • a sensitivity analysis produced a range of BCRs from 1.45 to 2.51.
-------------------	---

Cash-flow

Phase cash-flow

Stage 2 of the Construction phase

Year	Auckland Transport cost (\$000)	Transport Agency cost (\$000)	Total cost (\$000)
2014/15	649	731	1,380
2014/15 (Auckland Council Streetscape works in Stage 2)	0	0	2,210
TOTAL	649	731	3,590*

*Please note that this is the total amount for Stage 2 which includes Auckland Councils' streetscape works. Only \$1.38 million which relates to the cycleway project is eligible for Transport Agency funding.

Released under the Official Information Act 1982

Cost Estimate			
Construction phase (Stage 2 only)			
The construction phase commenced		2014/15 financial year	
Year	Current Construction Cost Estimate – \$m	Previous Construction Cost Estimate - \$m	Difference – Current vs. Previous - \$m
Expected	3,590	2,180	1,410
95th %ile	4,308	3,180	1,128
Comparison with previous estimate	There has been a significant increase in the expected cost for the project because of Auckland Councils streetscape in the Stage 2 section. Project costs associated with these streetscape works do not qualify for financial assistance and have been identified and excluded from this Transport Agency funding request.		
Whole of life costs	The annual maintenance costs have been assessed at approximately \$6,000 per annum.		
Risks			
Risk and opportunity assessment and management	A risk assessment was carried out and 1 extreme and 14 high risks were identified. A satisfactory risk management strategy is in place to manage each of the risks identified. The highest risk identified was from business owners objecting to the loss of on-road car parking. Auckland Transport has consulted with the business owners to assess the potential impacts on car parking and property access and this risk was mitigated in the completion of Stage 1 in September 2014 through communications with businesses and local residents.		
Funding plan and source			
NLTP	The project is a part of the group of activities named '2012-15 Cycleway Development & Construction', in the 2012-15 NLTP. All phases of the project are included in the 2012-15 NLTP with a reserve funding priority and an indicative profile of HML*. This activity is now developed enough to warrant an upgraded profile of HHL.		
Funding of phase and funding plan for construction/ implementation	<p>Local Share:</p> <p>Auckland Council's Annual Plan 2014/2015 (page 190) confirms funding of \$2.05 million for this project.</p> <p>Auckland Council's Long Term Plan 2012 details funding for the cycleway development programme of between \$10 and \$13 million per annum (Volume 2, p 188).</p> <p>National Share:</p> <p>Refer to Attachment 5 which shows that \$16 million is not committed nationally for the Walking and cycling Activity class (at 1st April 2015), indicating there are sufficient funds available to cover the \$731,000 required for the NZTA share for this project.</p>		
Recommended funding source	Transport Agency N funds are recommended for this phase as identified in the NLTP, based on the assessment profile of HHL and a priority class of 3.		

Confirm sufficient funds available	<p>There are sufficient funds available in Auckland Transport's current revised capital programme (current at 24/09/2014) for both construction stages of this project and there are sufficient Transport Agency funds available to allocate to this project.</p> <table border="1" data-bbox="459 315 1358 488"> <thead> <tr> <th colspan="4">Summary of Capital/Renewal Expenditure 2014/15 SOI</th> </tr> <tr> <th>Project Description</th> <th>Draft Annual Plan</th> <th>Revised 14/15 Annual Plan</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td colspan="4">Walking and Cycling Programme</td> </tr> <tr> <td>Dominion Road Corridor Upgrade (Cycle Path)</td> <td>-</td> <td>3,946,358</td> <td>Part of Dominion Road Corridor Budget</td> </tr> <tr> <td>Beach Road Cycle Route</td> <td>2,718,268</td> <td>4,866,510</td> <td></td> </tr> </tbody> </table>	Summary of Capital/Renewal Expenditure 2014/15 SOI				Project Description	Draft Annual Plan	Revised 14/15 Annual Plan	Comments	Walking and Cycling Programme				Dominion Road Corridor Upgrade (Cycle Path)	-	3,946,358	Part of Dominion Road Corridor Budget	Beach Road Cycle Route	2,718,268	4,866,510	
Summary of Capital/Renewal Expenditure 2014/15 SOI																					
Project Description	Draft Annual Plan	Revised 14/15 Annual Plan	Comments																		
Walking and Cycling Programme																					
Dominion Road Corridor Upgrade (Cycle Path)	-	3,946,358	Part of Dominion Road Corridor Budget																		
Beach Road Cycle Route	2,718,268	4,866,510																			
Procurement																					
Procurement procedure	<p>Procurement for this phase has been completed via a variation to an existing maintenance contract. It has been confirmed that this has been done in accordance with the AT Procurement Strategy, which has been endorsed by the Transport Agency.</p>																				

Recommendations and conditions of funding	
Recommendations	<p>It is recommended that the Chief Financial Officer of Auckland Transport approves the submission of this funding application for the Stage 2 construction phase of the 2012-15 Beach Road Cycle Highway as this project:</p> <ol style="list-style-type: none"> a. Provides a key connection on a strategically significant route within the ACN, which is a Transport Agency supported walking & cycling strategic network, to help alleviate congestion within a major urban area, and b. Assists safety and personal security via the construction of a dedicated cycleway facility.
Conditions of funding	<p>No conditions are considered necessary for this funding request.</p>

Released under the Official Information Act 1982

Attachment 5

NLTP extract showing sufficient funding available in AC3: Walking and Cycling

Activity Class	Previous commitments 2012-15 (\$000)	Approved commitments 2012-15 (\$000)	Total commitments 2012-15 (\$000)	Not committed 2012-15 (\$000)	Total (\$000)
AC 1 - Transport planning					
Locally delivered programmes	1,524.7	16,255.7	17,780.4		
National programmes	1,301.5	13,585.0	14,886.5		
State highways programmes	4,139.0	9,092.1	13,231.1		
Total	6,965.2	38,932.8	45,898.0	4,102.0	50,000.0
AC 2 - Road safety promotion					
Locally delivered programmes	0.0	37,245.2	37,245.2		
National programmes	0.0	57,203.7	57,203.7		
State highways programmes	0.0	1,923.9	1,923.9		
Total	0.0	96,372.8	96,372.8	1,627.3	98,000.1
AC 3 - Walking and cycling					
Locally delivered programmes	7,281.8	26,479.2	33,761.0		
National programmes	0.0	0.0	0.0		
State highways programmes	1,905.6	27,231.9	29,137.5		
Total	9,187.4	53,711.1	62,898.5	17,101.4	79,999.9

Table 1: The NLTP extract from TIO showing that \$17 million has not been committed for AC3: Walking and Cycling. Stage 2 of Beach Road requires \$731,000 Transport Agency share and the table above shows that it is within the NLTF availability (current to 17th April 2015)

Memorandum

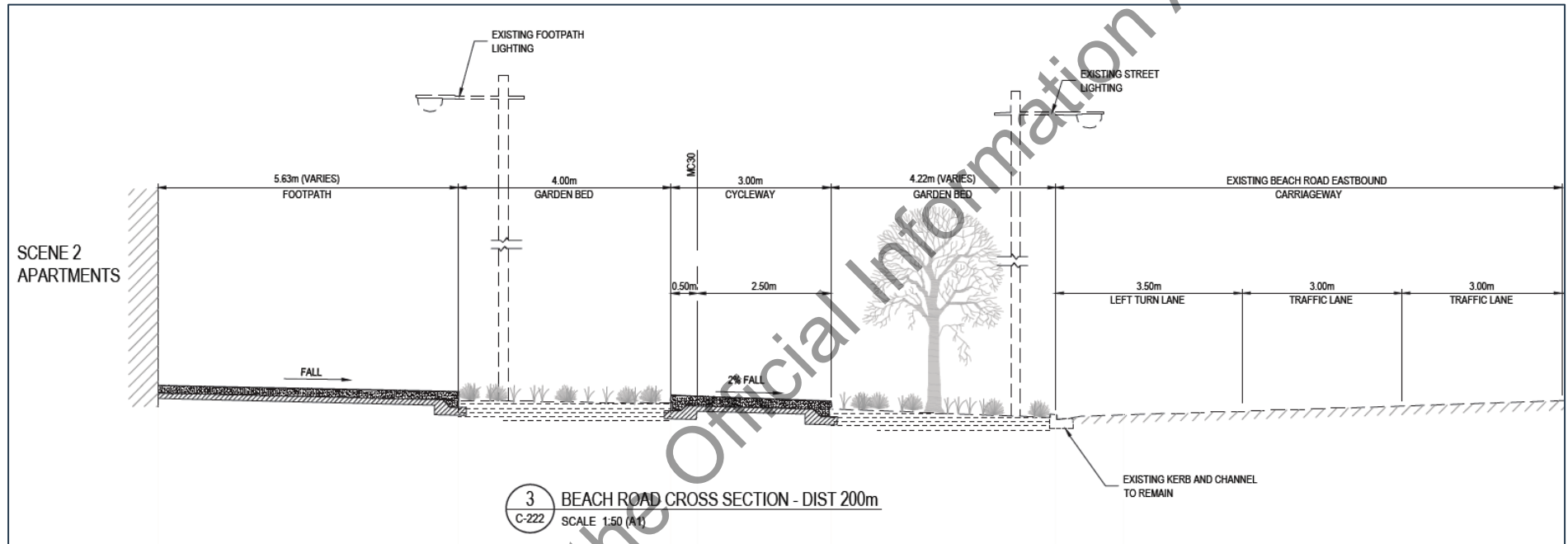


Figure 3: Typical cross section proposed for the Stage 2 construction of the Beach Road Cycleway



Figure 4: Concept picture of the streetscape works after completion of the Stage 2 section between Mahuhu Crescent and Britomart Place.