

DUNEDIN URBAN CYCLEWAYS PROGRAMME

Department: Transport

EXECUTIVE SUMMARY

- This report presents options for delivering projects within the 10 Year Plan 2021-31 Dunedin Urban Cycleways (DUC) programme.
- The DUC programme includes the following projects: Arterials, Tunnels Trail, North East Valley cycleway, and the final portion of the Harbour Link project.
- The DUC programme aims to provide an integrated cycle network across the City. It provides links to close the gaps in the existing cycleway network, and to extend the network further across the City.
- The 10 Year Plan 2021-31 has an allocation of \$21.9m for the DUC programme. Further investigation and planning work has determined that the cost estimates to deliver the DUC projects exceed the 10 Year Plan 2021-31 DUC budget.
- Two options are presented in this report. Option One proposes to amend the programme to fit within the existing budget. Option Two proposed to increase the budget to deliver the Tunnels Trail route and the two Arterial routes that connect to it.

RECOMMENDATIONS

That the Council:

a) **Considers** the options to deliver cycleway projects from the 10 Year Plan 2021 – 31 Dunedin Urban Cycleways budget.

BACKGROUND

Dunedin Urban Cycleways Programme

- In mid-2011, the DCC consulted on and adopted a Strategic Cycle Network (SCN). The SCN sets out primary routes for cycleways that will form a safe and integrated cycle network for the city.
- The Integrated Transport Strategy (ITS) was developed by DCC in 2013. The ITS aims to increase travel choices. The ITS includes a goal for Dunedin to reach a 40% active mode (walking, cycling and public transport) share by 2024.



- The ITS identifies that delivering the SCN is one of the mechanisms to achieve the 40% active mode share goal for Dunedin. To date, 30% of the SCN has been delivered through two DUC programmes.
- 9 The first DUC programme included the South Dunedin cycle network (2013 2015) and the Peninsula Connection project, which started in 2013 and is currently under construction.
- The second DUC programme focused on the central city cycle network, including the Harbour Link project. The Harbour Link project will complete the connection between the SH88 and Peninsula Connection shared paths. Through the second DUC programme, the Water of Leith walking and cycling bridge was completed in 2018 and a connection between the Water of Leith bridge and St Andrew Street was started in 2018. The second DUC programme is due to be completed in 2022/23.
- 11 The Council considered the third DUC programme in December 2018 and endorsed a programme (Attachment B) that included the following three projects.
 - <u>Arterials</u> upgrade 15.8 km (7 routes) of primary cycle routes, and related secondary routes to close gaps in the existing cycleway network. Most of the routes are on roads where there is currently no cycle infrastructure. The routes are:
 - i) Serpentine/McGlaggan Streets
 - ii) Forbury Road
 - iii) George/Bank Streets
 - iv) Main South Road/Main Road Fairfield
 - v) Musselburgh/Silverton Streets
 - vi) South Road (links Central Dunedin to the Tunnels Trail)
 - vii) Factory/Bush Road (links central Mosgiel to the Tunnels Trail)
 - Tunnels Trail build an off-road trail that links Dunedin with the outer suburbs and Mosgiel via two disused rail tunnels. The Tunnels trail is 15km long and is relatively flat. The Tunnels trail begins on Factory Road, follows the rail alignment past the Wingatui racecourse using an existing track and enters the Chain Hills Tunnel off Gladstone Road North. The trail exits the Caversham Tunnel onto an existing shared path on Barnes Drive that links to South Road.
 - North East Valley Cycleway upgrade cycle facilities on North Road to provide a higher level of service and improve safety and user experience.

Related Projects

- 12 In addition to the Arterials, Tunnels Trail and North East Valley cycleway projects, DCC is addressing other gaps in the SCN that are identified in the 2018 DUC programme by:
 - a) Improving walking and cycling safety and accessibility through the Shaping Future Dunedin Transport (SFDT) Princes Street Bus Priority and Corridor Safety project.



- b) Improving walking and cycling safety and accessibility on the shared path from Wharf Street to St Andrew Street through the SFDT Harbour Arterial project.
- c) Improving access for people walking and cycling to the Tertiary Precinct by providing a connection from the Water of Leith bridge and one-way cycle lanes (on State Highway 1) through the SFDT Central Cycle and Pedestrian Improvements – Albany Street project.
- 13 Waka Kotahi also completed a Heartland Ride between Dunedin and Waihola in 2021. 'Heartland Rides' are predominantly on-road cycle routes which link Great Rides with towns and cities to form a well connected New Zealand Cycle Network (NZCN). The Dunedin and Waihola ride consists of wayfinding signage on quiet roads to connect riders completing the Clutha Gold Trail finishing at Waihola (currently under construction) to Mosgiel.
- The DUC programme and SFDT projects (as approved in the 10 Year Plan 2021-31) have been included in the Otago Southland Regional Land Transport Plan (RLTP) 2021-27, and in the National Land Transport Plan (NLTP) 2021-24, which makes them eligible for Waka Kotahi cofunding.

DISCUSSION

- Two challenges for cyclists in Dunedin relate to the real and perceived road safety risk, and the lack of a coherent, accessible network. Progressing the Dunedin cycleway network addresses these challenges and creates the benefits of safe, healthier travel options, improved transport equity for those who are unable to drive or own a vehicle, and economic growth, particularly through regional tourism.
- Single Stage Business Cases (SSBC) have been completed for two of the three DUC projects, namely Arterials and Tunnels Trail. The SSBCs indicate a total cost of \$41.8m to deliver both projects, consisting of \$18m for the Arterials project and \$23.8m to deliver the Tunnels Trail.
- 17 In addition, \$3.5m is required to complete the Harbour Link project. The Harbour Link will connect the Peninsula Connection shared path to the shared path alongside SH88 to Port Chalmers.
- 18 The SSBC for the North East Valley cycleway has not been completed. SSBCs for the SFDT projects began in early 2022.
- The focus of this report is on the Tunnels Trail and Arterials projects as they are well advanced in the planning stages. These cycleway projects play a role in progressing an integrated and safe cycle network that connects Dunedin suburbs to the CBD. Attachment C provides further detail on how these projects connect to the existing and planned cycleway networks.
- The Tunnels Trail will also facilitate connection to the regional cycle network, via the Heartland Ride between Dunedin and Waihola. In time, this Dunedin to Waihola connection will provide links to other regional recreational cycle trails such as the Clutha Gold Trail, through to the Lake Dunstan Trail and the Otago Central Rail Trail.
- 21 Because the Tunnels Trail will play a role in both the city and regional cycle networks, Waka Kotahi have indicated that the Tunnels Trail is more likely to receive co-funding from the 2021-2024 NLTP. Waka Kotahi assessed the Arterials project as a lower priority and therefore co-funding is less certain in the 2021-24 NLTP.



- Two of the Arterials Project routes, South Road and Factory Road, are required to ensure the Tunnels Trail project connects the Dunedin CBD to Mosgiel. The South Road Arterial route provides cycle lanes on South Road between Barnes Drive and Princes Street, while the Factory Road Arterial route provides cycle lanes on Factory Road and Bush Road between Wingatui Road and Aitken Place. These Arterial Project cycleways are estimated to cost \$2.6m and \$3.4m respectively.
- The Tunnels Trail project will also integrate with the SFDT Mosgiel and Burnside Park and Ride locations, providing another travel option for people commuting from the south/south-west of the central city. These parking facilities could serve people wanting to park and use the cycleway to access the central city.

Dunedin Urban Cycleways Budget

- The DUC budget in the 10 Year Plan 2021-31 is \$21.9m, split across the 10 years.
- \$45.3m is required to deliver the Tunnels Trail and Arterials cycleways and complete the Harbour Link project. Given the budget shortfall identified by the SSBC process, there is a need to prioritise the projects or increase the budget.

OPTIONS

- Planning work has shown that the Tunnels Trail delivers more benefits compared to the Arterials project and it is more likely to receive Waka Kotahi co-funding.
- The business case process has also shown that the DUC budget in the 10 Year Plan 2021-31 is insufficient to deliver the entire DUC programme. As a consequence of the DUC budget shortfalls, staff recommend Council consider the Tunnels Trial and elements of the Arterials project be progressed to delivery.
- Staff recommend that Council reconsider the remaining projects; North East Valley cycleway, Arterial routes, and the final portion of the Peninsula Connection project (noting that the final section of the Peninsula Connection between Portobello and Harwood remains unfunded by Waka Kotahi) as part of the next 10 Year Plan 2024-34.
- 29 There are two options presented in this report to progress projects within the DUC programme:
 - 1. Amend the timing of the existing DUC budget within the 2021-31 10 Year Plan to deliver a section of the Tunnels Trail (Abbotsford to Dunedin Central) and the Arterial route that links to it (South Road).
 - 2. Amend the timing and approve \$11.4m of additional DUC programme capital budget to deliver the Tunnels Trail project and the two Arterial routes that link to it (South Road and Factory Road).

Option One – Amend the timing of existing DUC budgets and deliver a section of the Tunnel Trail from Abbotsford to Barnes Drive

Option One proposes to amend the timing of the 2021-31 10 Year Plan DUC budget to deliver part of the Tunnels Trail from Abbotsford School to Barnes Drive and the Arterial route on South Road in the next three years. This would include detailed design, land purchase and consenting work for the whole of the Tunnels Trail with the remainder of the budget considered in the next 10 Year Plan 2024-2034.



- The work to complete this section of the Tunnels Trail and the South Road Arterial route would cost approximately \$18.4m.
- The budget table below shows there is no change to the total 10 Year Plan 2021-31 budget, however, the timing of the spend is accelerated. This leaves no DUC budget in years 2026/27 31 to complete further cycleway projects. The amended timing for Option One is shown in Attachment A Table One.

Total Budget	10 Year 2021-31 Total
10 Year Plan 2021-31	21,925
Proposed	21,925
Variance	-

The individual project budgets for Option One are presented in the table below. The amended timing for the Option One project spends is shown in Attachment A - Table Two.

Project Breakdown	Budget Total
Harbour Link	3,500
Tunnel Trail	15,837
Arterials (South Road)	2,588
Total	21,925

34 The Waka Kotahi funding subsidy for Option One is shown in the table below. The amended timing of the Option 1 Waka Kotahi funding over the 10 Year Plan 2021-31 is shown in Attachment A - Table Three.

Funding	10 Year 2021-31 Total
10 Year Plan 2021-31	
Waka Kotahi Subsidy	11,212
DCC share	10,713
Proposed Budget	
Waka Kotahi Subsidy	11,299
DCC share	10,626
Variance	
Waka Kotahi Subsidy	87
DCC share	(87)

Advantages

- This option can be delivered within the existing 10 Year Plan 2021-31 budget.
- The cycleway will link to the Burnside Park and Ride, providing an opportunity for people wanting to park and use the cycleway to access the central city.



- The project will improve cycling safety and accessibility, providing people with travel choices
- The projects support the Council's Carbon Zero by 2030 goal, and the 40% active mode share goal from the ITS.
- A section of the network will be delivered providing a flat and integrated active transport link between Dunedin CBD and Green Island and Abbotsford.

Disadvantages

- Gaps in the existing Dunedin city cycleway network to be delivered under by the Arterials project will not be addressed.
- Mosgiel will continue to be disconnected from the Dunedin cycle network.
- There is a risk the project will not be eligible for Waka Kotahi co-funding from the National Land Transport Plan 2021-24 if DCC has not committed to fund the entire project. The Tunnels Trail SSBC will need to be reconsidered to determine if delivering only a section of the project will produce a positive benefit cost ratio (e.g. as it will not provide a connection to the regional cycle trails).
- There is no DUC budget in years 2026/27 31 to complete further cycleway projects.

Option Two – Amend the timing and approve an \$11.4m increase to DUC budget to deliver the Tunnels Trail from Mosgiel to Dunedin

- 35 Option Two proposes to amend the timing and increase the 10 Year Plan 2021-31 DUC budget by \$11.4m. This budget increase would provide sufficient funding to deliver the Tunnels Trail project and the two Arterials projects (South Road and Factory Road) that connect it to Dunedin CDB and Mosgiel Centre.
- The budget table below shows there is a \$11.4m increase to the 10 Year Plan 2021-31 budget. The timing of the spend has also been accelerated. This leaves no DUC budget in years 2026/27 31 to complete further cycleway projects. The amended timing for the Option Two 10 Year Plan 2021-31 budget is shown in Attachment A Table Four:

Total Budget	10 Year 2021-31 Total
10 Year Plan 2021-31	21,925
Proposed	33,318
Variance	11,393

37 The individual project budgets for Option Two are presented in the table below. The amended timing for the Option Two project spends is shown in Attachment A - Table Five.

Project breakdown	Budget Total
Harbour Link	3,500
Tunnel Trail	23,800
Arterials (South Road &	
Factory Road)	6,018



Total	33,318
· Otal	33,310

38 The Waka Kotahi funding subsidy for Option Two is shown in the table below. The amended timing of the Option 2 Waka Kotahi funding over the 10 Year Plan 2021-31 is shown in Attachment A - Table Six:

Funding	10 Year 2021-31 Total
10 Year Plan 2021-31	
Waka Kotahi Subsidy	11,212
DCC share	10,713
Proposed Budget	
Waka Kotahi Subsidy	17,109
DCC share	16,209
Variance	
Waka Kotahi Subsidy	5,897
DCC share	5,496

Advantages

- Creates a coherent end to end cycleway, providing a flat and integrated active transport link between Dunedin CBD and Mosgiel Centre.
- The cycleway will integrate with the Mosgiel and Burnside Park and Rides, providing an opportunity for people wanting to park and use the cycleway to access the central city.
- The project will improve cycling safety and accessibility, providing people with travel choices; and supports Council's Carbon Zero by 2030 goal, and the 40% mode share goal from the ITS.
- Waka Kotahi co-funding from the National Land Transport Plan 2021-24 is more likely because the Tunnels Trail will be integrated with the regional and national cycleway network.

Disadvantages

- Additional capital budget is required to deliver this option with an associated increase in opex cost to cover interest payments.
- Gaps in the existing Dunedin city cycleway network to be delivered under by the Arterials project will not be addressed.
- There is no DUC budget in years 2026/27 31 to complete further cycleway projects.



NEXT STEPS

- 39 If option one is approved the Roading and Footpath capital budget will be updated for the May 2022 Annual Plan Council meeting to reflect the amended timing.
- If option two is approved the Roading and Footpath capital budget will be updated for the May 2022 Annual Plan Council meeting to reflect the amended timing and increase in budget.
- 41 Staff will provide a report to Council for the 10 Year Plan 2024-2027 meeting to consider funding for the remaining projects to complete the DUC programme (North East Valley cycleway, Arterials project and Peninsula Connection).

Signatories

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Attachments

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The projects will be contributing to the Carbon Net Zero by 2030 goal, and the 40% mode share goal from the ITS.

LTP/Annual Plan / Financial Strategy /Infrastructure Strategy

The DUC programme is included in the $2021 - 31\ 10\ Year\ Plan$. This report presents options to alter the budget.

Financial considerations

The financial implications depend on the option chosen, and are covered in the body of the report.

Significance

Both options presented in this report are considered low in terms of the Council's Significance and Engagement Policy.

Engagement – external

The Tunnels Trail and Arterials projects have undergone external engagement through the business case process through multiple workshops and individual meetings. Further external engagement will be undertaken to inform the final detailed design. The Dunedin Tunnels Trails Trust are project partners and have been involved throughout the project.



SUMMARY OF CONSIDERATIONS

Engagement - internal

The Tunnels Trail and Arterials projects have included engagement with Parks and Recreation, 3 Waters, Events and Community Development, Marketing and Communications, City Development, and Enterprise Dunedin.

Risks: Legal / Health and Safety etc.

There are no identified risks.

Conflict of Interest

There are no known conflicts of interest.

Community Boards

The Dunedin Tunnels Trail project preferred route is located within the Mosgiel-Taieri Community Board boundary and nearby the Saddle Hill Community Board boundary. Representatives from both Community Boards have been included as a key stakeholder throughout the business case development. The Transport team provide regular updates to the Mosgiel-Taieri Community Board about the Project.

BUDGET OPTIONS TABLE

Option One – Amend the timing of existing DUC budgets and deliver a section of the Tunnel Trail from Abbotsford to **Barnes Drive**

Table One: The amended timing of the 10 Year Plan 2021 -23 DUC budget for Option One:

Total Budget	Budget 21/22 \$000	Budget 22/23 \$000	Budget 23/24 \$000	Budget 24/25 \$000	Budget 25/26 \$000	Budget 26/27 \$000	Budget 27/28 \$000	Budget 28/29 \$000	Budget 29/30 \$000	Budget 30/31 \$000	10 Year 2021-31 Total
10 Year											
Plan 2021-											
31	1,000	1,005	2,100	3,820	-	2,000	4,500	2,500	2,500	2,500	21,925
Proposed	2,400	6,900	4,500	7,088	1,037	-	-	-	-	-	21,925
Variance	1,400	5,895	2,400	3,268	1,037	(2,000)	(4,500)	(2,500)	(2,500)	(2,500)	-

Table Two – The project breakdown for Option One:

Project breakdown	Budget 21/22 \$000	Budget 22/23 \$000	Budget 23/24 \$000	Budget 24/25 \$000	Budget 25/26 \$000	Budget 26/27 \$000	Budget 27/28 \$000	Budget 28/29 \$000	Budget 29/30 \$000	Budget 30/31 \$000	Budget Total
Harbour Link	2,100	1,400	-	-	-	-	-	-	-	-	3,500
Tunnel Trail	300	5,500	4,500	4,500	1,037	-	-	-	-	-	15,837
Arterials											
(South Road)	-	-	-	2,588	-	-	-	-	-	-	2,588
Total	2,400	6,900	4,500	7,088	1,037	-	-	-	-	-	21,925

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Option One – Amend the timing of existing DUC budgets and deliver a section of the Tunnel Trail from Abbotsford to Barnes Drive

Table Three – The Waka Kotahi funding subsidy for Option One:

Funding	Budget 21/22 \$000	Budget 22/23 \$000	Budget 23/24 \$000	Budget 24/25 \$000	Budget 25/26 \$000	Budget 26/27 \$000	Budget 27/28 \$000	Budget 28/29 \$000	Budget 29/30 \$000	Budget 30/31 \$000	10 Year 2021-31 Total
10 Year											
Plan											
2021-31											
Waka											
Kotahi											
Subsidy	530	523	1,071	1,948	-	1,020	2,295	1,275	1,275	1,275	11,212
DCC share	470	482	1,029	1,872	-	980	2,205	1,225	1,225	1,225	10,713
Proposed											
Budget											
Waka											
Kotahi											
Subsidy	1,272	3,588	2,295	3,615	529	_	-	-	-	-	11,299
DCC share	1,128	3,312	2,205	3,473	508	-	-	-	-	-	10,626
Variance								Ì			
Waka											
Kotahi											
Subsidy	742	3,065	1,224	1,667	529	(1,020)	(2,295)	(1,275)	(1,275)	(1,275)	87
DCC share	658	2,830	1,176	1,601	508	(980)	(2,205)	(1,225)	(1,225)	(1,225)	(87)



Option Two – Amend the timing and approve an \$11.4M increase to DUC budget to deliver the Tunnels Trail from Mosgiel to Dunedin

Table Four – Amended timing of the 10 Year Plan 2021-23 DUC budget

Total Budget	Budget 21/22 \$000	Budget 22/23 \$000	Budget 23/24 \$000	Budget 24/25 \$000	Budget 25/26 \$000	Budget 26/27 \$000	Budget 27/28 \$000	Budget 28/29 \$000	Budget 29/30 \$000	Budget 30/31 \$000	10 Year 2021-31 Total
10 Year Plan											
2021-31	1,000	1,005	2,100	3,820	-	2,000	4,500	2,500	2,500	2,500	21,925
Proposed	2,400	6,900	8,588	6,000	9,430	-	-	-	-	-	33,318
Variance	1,400	5,895	6,488	2,180	9,430	(2,000)	(4,500)	(2,500)	(2,500)	(2,500)	11,393

Table Five – The Project Breakdown for Option Two

Project breakdown	Budget 21/22 \$000	Budget 22/23 \$000	Budget 23/24 \$000	Budget 24/25 \$000	Budget 25/26 \$000	Budget 26/27 \$000	Budget 27/28 \$000	Budget 28/29 \$000	Budget 29/30 \$000	Budget 30/31 \$000	Budget Total
Harbour											
Link	2,100	1,400	-	-	-	-	-	-	-	-	3,500
Tunnel Trail	300	5,500	6,000	6,000	6,000	-	-	-	-	-	23,800
Arterials											
(South Road)	-	-	2,588	-	3,430	-	-	-	-	-	6,018
Total	2,400	6,900	8,588	6,000	9,430	-	-	-	-	-	33,318

Option Two – Amend the timing and approve an \$11.4M increase to DUC budget to deliver the Tunnels Trail from Mosgiel to Dunedin

Table Six - The Waka Kotahi Subsidy

Funding	Budget 21/22 \$000	Budget 22/23 \$000	Budget 23/24 \$000	Budget 24/25 \$000	Budget 25/26 \$000	Budget 26/27 \$000	Budget 27/28 \$000	Budget 28/29 \$000	Budget 29/30 \$000	Budget 30/31 \$000	10 Year 2021-31 Total
10 Year Plan 2021-31											
Waka Kotahi											
Subsidy	530	523	1,071	1,948	-	1,020	2,295	1,275	1,275	1,275	11,212
DCC share	470	482	1,029	1,872	-	980	2,205	1,225	1,225	1,225	10,713
Proposed											
Budget											
Waka Kotahi											
Subsidy	1,272	3,588	4,380	3,060	4,809	-	_	_	-	-	17,109
DCC share	1,128	3,312	4,208	2,940	4,621	-	-	-	-	-	16,209
Variance											
Waka Kotahi											
Subsidy	742	3,065	3,309	1,112	4,809	(1,020)	(2,295)	(1,275)	(1,275)	(1,275)	5,897
DCC share	658	2,830	3,179	1,068	4,621	(980)	(2,205)	(1,225)	(1,225)	(1,225)	5,496







