

## PROGRAMME BUSINESS CASE UPDATE

Department: Transport

### REASONS FOR CONFIDENTIALITY

- Grounds: S48(1)(a) - The public conduct of the part of the meeting would be likely to result in the disclosure of information for which good reason for withholding exists under section 7.
- Reason: S7(2)(c)(i) - The withholding of the information is necessary 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 interest that such information should continue to be supplied.

### EXECUTIVE SUMMARY

- 1 This report updates Council on the Shaping Future Dunedin Transport (SFDT) Programme Business Case (PBC).
- 2 Staff have been informed that Waka Kotahi's Board endorsed a preferred programme on 25 November 2021. The preferred programme retains the existing one-way system with some safety and amenity improvements. The decision is expected to be announced publicly before Christmas.
- 3 Council adopted seven projects identified in the SFDT PBC as part of the 2021-31 10 Year Plan but has not yet taken a formal position on the future form of State highway 1 through the city.

### RECOMMENDATIONS

That the Council:

- a) **Decides** if Council wants to have a position on the preferred option for the State highway 1 system through the city.

### BACKGROUND

- 4 In 2018, the government announced the central city location for the \$1.4B New Dunedin Hospital (NDH). The Ministry of Health asked Waka Kotahi NZ Transport Agency and Council to look at changes to State highway 1 and State highway 88 on St Andrew Street to improve access

and integration between the hospital and the city. These state highways are nationally important transport routes that provide key north-south connections and the route to Port Otago.

- 5 Within the CBD the presence of the state highway leads to reduced safety, connectivity and amenity (air and noise pollution) for pedestrians. The construction of the NDH will exacerbate existing issues and cause disruption to traffic flows during construction.
- 6 The Connecting Dunedin Partners (Waka Kotahi NZ Transport Agency, Dunedin City Council and Otago Regional Council) developed a Programme business case (PBC) that explores options to mitigate disruption during construction and to establish the best long term transport network for Dunedin to:
  - a) Enable integration of the New Dunedin Hospital with the city.
  - b) Stimulate economic growth and regeneration.
  - c) Provide for safe and accessible people friendly streets.
  - d) Improve city liveability.
- 7 As part of the 2021-31 10 Year Plan, Council adopted the seven projects identified in the PBC with work already progressing:
  - a) Harbour Arterial efficiency improvements
  - b) Princes Street bus priority and corridor safety plan
  - c) Central City Parking Management
  - d) Central City Walking and Cycling improvements
  - e) Mosgiel and Burnside Park and Ride
  - f) Central City Bike Hubs
  - g) Travel Demand Management expansion.
- 8 Staff have been advised that Waka Kotahi's Board endorsed the PBC on 25 November 2021 with a preferred programme that retains the existing one-way system with some safety and amenity improvements. The decision is expected to be announced publicly before Christmas.

## **DISCUSSION**

- 9 The PBC considered two programmes, which comprised common elements of improvements to public transport, walking and cycling and local roads. The two programmes were differentiated by proposed options for State highway 1.
  - a) Programme 1 retained the existing one-way configuration with speed limit reductions in the CBD with some amenity and cycleway improvements.
  - b) Programme 2v3 proposed a two-way local road with a 30km/h speed limit and significant amenity improvements on the existing northbound one way, with the state highway being

consolidated on the existing south bound route. The state highway would retain a 50km/h speed limit and have reduced parking to enable an extra lane along parts of the corridor.

- 10 In the PBC multicriteria analysis, Programme 2v3 scored better on outcomes for liveability, place quality, travel choice, connectivity and carbon zero with equal scores for safety and affordability. Programme 2v3 scored lower than Programme 1 on technical challenge and journey time reliability. Scoring between the two programmes was close. There was a lack of consensus on the weighting of outcomes, with sensitivity testing resulting in lack of a clear preferred option.
- 11 A Health Impact Assessment (HIA) was commissioned by the Local Advisory Group for the New Dunedin Hospital and this was presented within the PBC. The HIA showed a preference for the 2v3 State highway option.

## OPTIONS

- 12 Staff have recently been advised of the Waka Kotahi Board decision and have not had sufficient opportunity to provide detailed advice on the State highway options. Programme 2v3 has better alignment with Council's Integrated Transport Strategy focus on safety, travel choices and connected communities and is better aligned with Council's carbon zero 2030 commitment.
- 13 Waka Kotahi's position on the state highway system has been that the PBC and the sensitivity assessments of the multi-criteria analysis didn't provide a compelling evidence base for transformation of the state highway at this time.
- 14 Waka Kotahi indicated they would seek to further review the State highway programme in the 2024/27 NLTP. The PBC identifies future conditions that may result in consideration of further changes to the one-way system. These include pedestrian levels of services, safety trends, Land use changes, shifts in government direction and outcomes focussed review.
- 15 The draft communication provided to staff on the Waka Kotahi Board decision would mean that Connecting Dunedin partners will be seen to be endorsing the PBC, including retaining the one-way State highway configuration. As there is no formal Council position on the state highway 1 system, staff have provided the PBC to Council as an opportunity to take a position in advance of any formal announcement on the SFDT PBC.

## NEXT STEPS

- 16 Staff will continue to progress the seven Council lead projects included in the 10Y plan.
- 17 The Connecting Dunedin partners will agree the communication messaging for the release of the PBC.

## Signatories

|             |                                                                                                         |
|-------------|---------------------------------------------------------------------------------------------------------|
| Author:     | Simone Handwerk - Transport Planning Team Leader<br>Nick Sargent - Transport Strategy Manager           |
| Authoriser: | Jeanine Benson - Group Manager Transport<br>Simon Drew - General Manager Infrastructure and Development |

## Attachments

|   | <b>Title</b>                             | <b>Page</b> |
|---|------------------------------------------|-------------|
| A | Shaping Future Dunedin Transport summary |             |

## SUMMARY OF CONSIDERATIONS

### ***Fit with purpose of Local Government***

This decision enables democratic local decision making and action by, and on behalf of communities. This decision promotes the social, economic, environmental and cultural well-being of communities in the present and for the future.

### ***Fit with strategic framework***

|                                         | Contributes                         | Detracts                 | Not applicable                      |
|-----------------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| Social Wellbeing Strategy               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Economic Development Strategy           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Environment Strategy                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Arts and Culture Strategy               | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3 Waters Strategy                       | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Spatial Plan                            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Integrated Transport Strategy           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Parks and Recreation Strategy           | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other strategic projects/policies/plans | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

The Council projects in the Shaping Future Dunedin Transport programme will improve amenity, safety and mode choice. Improvements to public transport, walking and cycling networks are expected to result in improved environmental and social outcomes and contribute to the goals of the Integrated Transport Strategy.

### ***Māori Impact Statement***

There are no known impacts for Māori.

### ***Sustainability***

Improvements to public transport, walking and cycling networks and an enhanced travel demand management programme are anticipated to contribute to sustainability.

### ***LTP/Annual Plan / Financial Strategy /Infrastructure Strategy***

Seven projects that form part of the Shaping future Dunedin Transport programme have been included in the 10Y plan.

### ***Financial considerations***

There are no budgetary implications from the recommendations in this report.

### ***Significance***

This decision is considered low in terms of the Council's Significance and Engagement Policy.

### ***Engagement – external***

Extensive community engagement was undertaken as part of the development of the Shaping future Dunedin Transport Programme.

### ***Engagement - internal***

There has been internal engagement done by the transport team by briefing other departments

**SUMMARY OF CONSIDERATIONS*****Risks: Legal / Health and Safety etc.***

If Council and Waka Kotahi messaging on the release of the Shaping Future Dunedin Transport PBC is not aligned there is a reputational risk.

***Conflict of Interest***

There is no known conflict of interest.

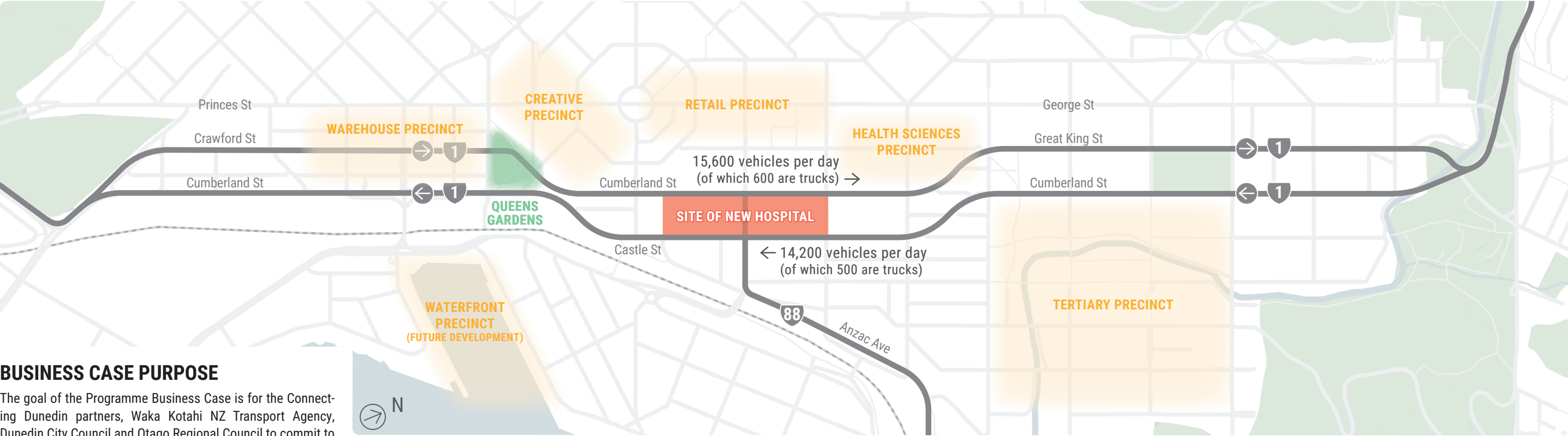
***Community Boards***

No implications for Community Boards.

# Shaping Future Dunedin Transport Context and Background

## CENTRAL CITY CONNECTIVITY

The SH1 one-way system and SH88 are nationally important transport routes, providing key north-south connections and the route to Port Otago. However, high traffic volumes and dominant north-south traffic flows along the SH1 one way system divide the geographically constrained city centre, leading to reduced pedestrian connectivity and poor amenity issues (air and noise pollution). The New Dunedin Hospital site has six of the proposed seven road frontages on the state highway network, which will exacerbate these issues.



## BUSINESS CASE PURPOSE

The goal of the Programme Business Case is for the Connecting Dunedin partners, Waka Kotahi NZ Transport Agency, Dunedin City Council and Otago Regional Council to commit to the best long-term transport and urban mobility system for Dunedin that will:

- Enable integration of the new hospital with the city
- Stimulate economic growth and regeneration
- Provide for safe and accessible people friendly streets
- Improve city liveability

## CONTEXT

Dunedin is the second largest city in the South Island. It is considered one of the four main cities of NZ for historic, cultural and geographic reasons. Population growth means Dunedin is a 'medium growth' city. Dunedin has a diverse economy, with significant tertiary education and health sectors. The city is home to around 25,000 tertiary students and staff, and Dunedin hosts the primary hospital for the Southern Region; a teaching hospital with strong links to the University.

In 2018 the government announced the location for the \$1.4B New Dunedin Hospital (NDH). MOH then asked Waka Kotahi and DCC to look at a change to the roads to improve access and integration between the hospital and the city, including considering a change to the configuration of SH1 through Dunedin. This was the catalyst to progress work DCC started in 2013, looking at the benefits a change to the configuration of SH1, including making it a two-way system, could bring. A business case completed in 2018 confirmed the scope should be broadened to include access the city by all transport modes.

## PROBLEM STATEMENTS

- 1) The NDH site fronts the busiest roads in the central city which will create a barrier to safe and easy pedestrian access to the building and result in poor integration and interaction with the city.
- 2) The design, use and management of central city routes means many roads operate in a similar way resulting in dispersal of traffic and severance between key city precincts, creating safety and amenity issues and suppressing walking and cycling.

## WHY INVEST?

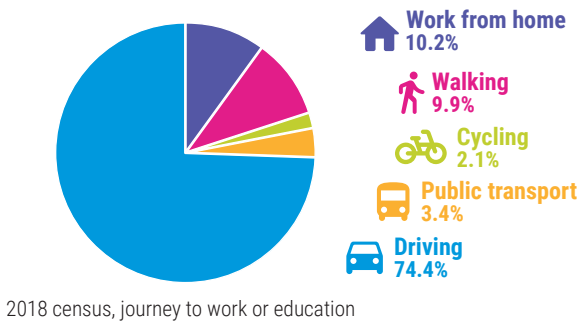
- **Construction of the new hospital will start in 2022.** Traffic management will cause disruption and delays for people driving and cycling on SH1. Travel choices are needed to keep the city moving.
- **Severance impact caused by the SH1 one-way system and the railway is recognised** in DCC's Central City Plan and the University Masterplan documents. This severance reduces amenity and pedestrian freedom of movement between city precincts.
- **St Andrew Street between the two new hospital sites is part of SH88,** the primary connection between SH1 and Port Otago. This road needs work to allow the hospital to operate safely and provide a suitable pedestrian environment for patients, visitors and staff.
- **The Climate Change Response Amendment Act 2019 commits NZ to be net zero carbon by 2050.** Changing how people travel is one of the main ways to achieve this target.
- **Car trips make up 74% of the journey to work (2018),** which reduces efficiency, amenity, the potential to achieve carbon reduction targets, and parking availability.
- **There is High Collective Crash Risk on key routes** including sections of SH1 northbound and southbound, and Princes Street.

## OUTCOMES SOUGHT

- Improve safety
- Improve multi-modal access to central city
- Improve place quality and walking environment in the central city
- Improve attractiveness of city as place to invest, live, work and play
- Enhance connectivity between key destinations for active modes
- Improve environmental outcomes to meet carbon reduction targets

## MODE SHARE

There is significant opportunity to achieve improved mode share across sustainable modes.



## PEDESTRIAN RATING SCORES

Low amenity city streets around the NDH site are creating a barrier to pedestrian movements and enjoyment of place.

POOR  GOOD



## PROGRAMME PARTNERS

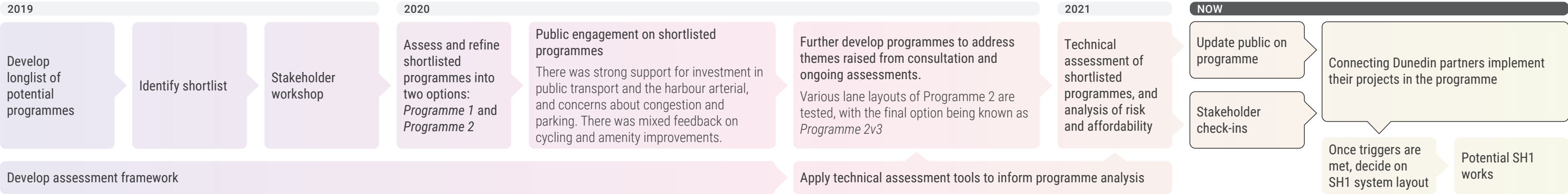
This work has been completed under the Connecting Dunedin partnership between Waka Kotahi, DCC and ORC.





# Shaping Future Dunedin Transport Programme Development

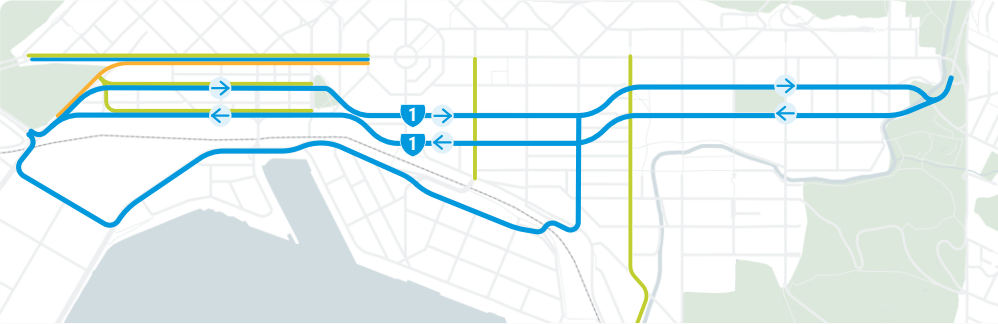
## HOW WE GOT TO WHERE WE ARE



## SHORTLIST

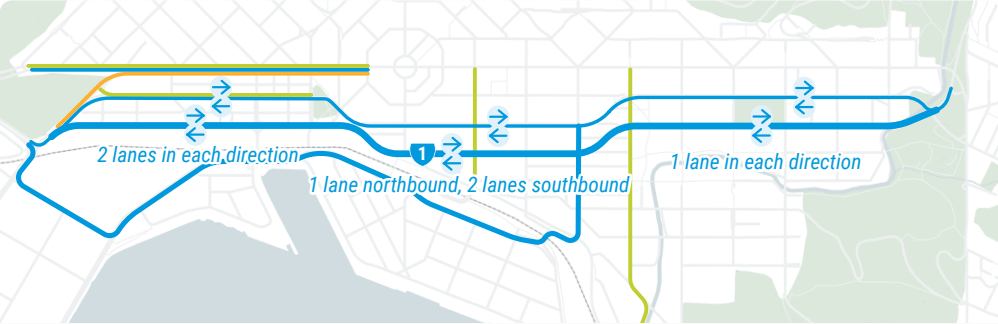
Both shortlisted programmes featured a selection of common projects focused on improving the level of service for public transport and active travel such as walking and cycling, in addition to the harbour arterial project. The major differences between programmes were in the layout of existing one-way arterial roads, shown below.

### Programme 1



- Retains the one-way system in an upgraded form:
  - SH1 speed limit is reviewed
  - Extends the existing separated cycle facilities south to the Oval
- Maintains existing parking along the one-way system
- Targeted amenity improvements on the one-way system around Queens Gardens, the NDH, and the University

### Programme 2v3



- Consolidates SH1 onto a single two-way arterial road (the existing southbound one-way), with:
  - two lanes in each direction south of Queens Gardens
  - one lane northbound and two lanes southbound between Queens Gardens and Albany Street
  - one lane in each direction north of Albany Street
- 50kph speed limit on SH1 is retained
- Transforms the existing northbound one-way into a two-way local road with slow speeds and a focus on amenity
- Relocates the existing separated cycle facilities from SH1 arterial to the new local road and extends them south to the Oval
- Relocates most parking from SH1 to the new local road

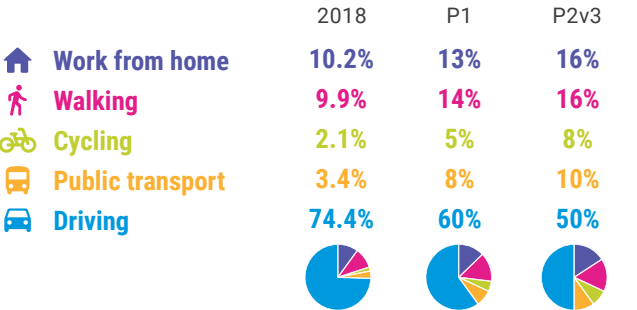
## PROGRAMME ANALYSIS

### Engagement

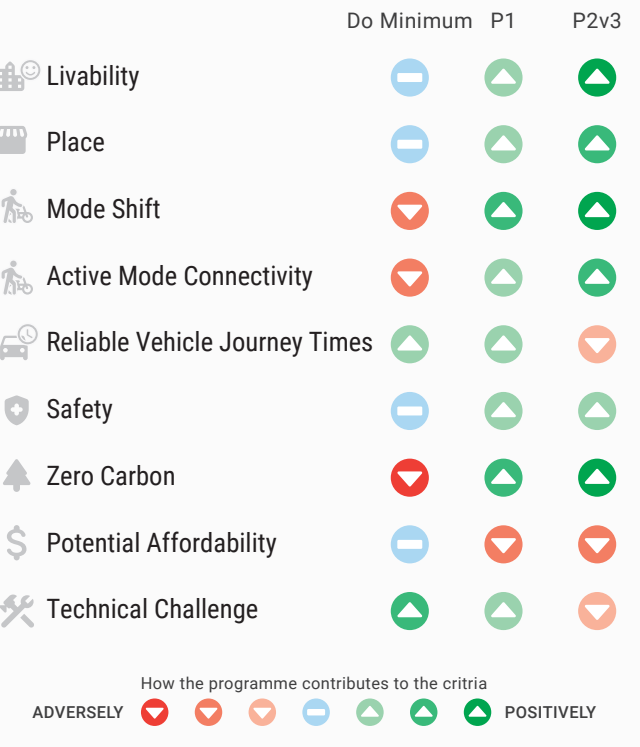
A stakeholder workshop in November 2019 was attended by representatives from 40 organisations. There was support for a focus on public transport and mode shift, and attendees requested these interventions be included in all programme options. There was interest in the opportunities offered by a two-way option, but differing views on whether one-way or two-way would serve Dunedin best.

Public engagement in mid-2020 showed strong support for investment in public transport and the harbour arterial, and concerns about congestion with a two lane, two-way arterial.

### Projected Mode Shift

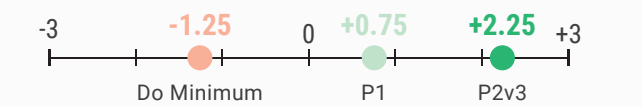


### Multi-Criteria Analysis



### Health Impact Assessment

Programmes were assigned scores between -3 and 3 for how they are expected to impact on different health measures, through research and discussion with hard to reach groups.



### Benefit-Cost Analysis

|                                 | P1     | P2v3    |
|---------------------------------|--------|---------|
| <strong>Benefits</strong>       |        |         |
| Travel Time                     | \$38m  | (\$46m) |
| Vehicle Emissions               | \$3m   | \$3m    |
| Reduced Crashes                 | \$95m  | \$79m   |
| Active Modes                    | \$36m  | \$39m   |
| Valuing Urban Realm Toolkit     | \$16m  | \$20m   |
| Improved Wellbeing              | \$112m | \$230m  |
| <strong>Costs</strong>          |        |         |
| Benefit/Cost Ratio              | 3.2    | 2.7     |
| Benefit/Cost Ratio (excl. WEBs) | 2.0    | 0.7     |

WEBs: Wider Economic Benefits

## ANALYSIS OUTCOMES

**Programme 1 provides some improvements** in connectivity, place quality/amenity, mode shift and carbon reduction. It provides more reliable journey times for drivers on key transport routes and is lower cost, less technically challenging and lower risk. Benefits primarily relate to improving access and encouraging use of a wider range of transport types. Pedestrian connections across the SH1 one-way pair to the NDH will be improved with enhanced crossing provision and reduced traffic speeds, and there will be some investment in amenity on SH1 adjacent to the NDH site.

**Programme 2v3 provides transformational change** by reconfiguring the heart of the city by consolidating arterial traffic on a single, two-way route. This allows the existing SH1 northbound road to become a people-focused local road. This enhances the pedestrian environment, provides an opportunity for changes in land use to higher density/residential, makes walking and cycling more attractive, and leads to economic growth and carbon reductions. However, journey times are less reliable for drivers, and it is more technically challenging, with greater cost and risk.



# Shaping Future Dunedin Transport Programme



**1 State Highway Works**

- 1a** SH1 Safety Improvements
- 1b** SH1 Speed Management
- 1c** Relocate SH88 to Frederick Street
- 1d** Pine Hill Intersection Upgrade
- 1e** Additional Access and Safety Improvements
- 1f** Queens Gardens to Oval Cycleway

**WAKA KOTAHI**

**2 Harbour Arterial Upgrade**

- 2a** Directional Signage and Wayfinding
- 2b** Major and Minor Intersection Upgrades
- 2c** Corridor Improvements
- 2d** Ward Street Overbridge Upgrade

**DCC**

**3 Public Transport Improvements**

- 3a** Central Bus Hub and Superstop Upgrades
- 3b** Frequency and Fare Review
- 3c** Southern Bus Priority

**ORC**  
**DCC**

**4 Parking Management Improvements**

- 4a** Develop Parking Management Policy
- 4b** Introduce Parking Wayfinding System
- 4c** Upgrade Parking Technology
- 4d** Improve Data Collection and Reporting

**DCC**

**5 Park and Ride**

- 5a** Mosgiel Park and Ride
- 5b** Burnside Park and Ride

**DCC**

**6 Active Mode Improvements**

- 6a** Slow Speed Zone
- 6b** Princes Street Improvements
- 6c** Albany Street Cycleway
- 6d** St Andrew Street Improvements
- 6e** George and Bank Streets Safer Streets Upgrade
- 6f** Bicycle Hubs and Parking Facilities

**DCC**

**7 Behaviour Change Programme**

- 7a** Travel planning with major employers
- 7b** Demand management

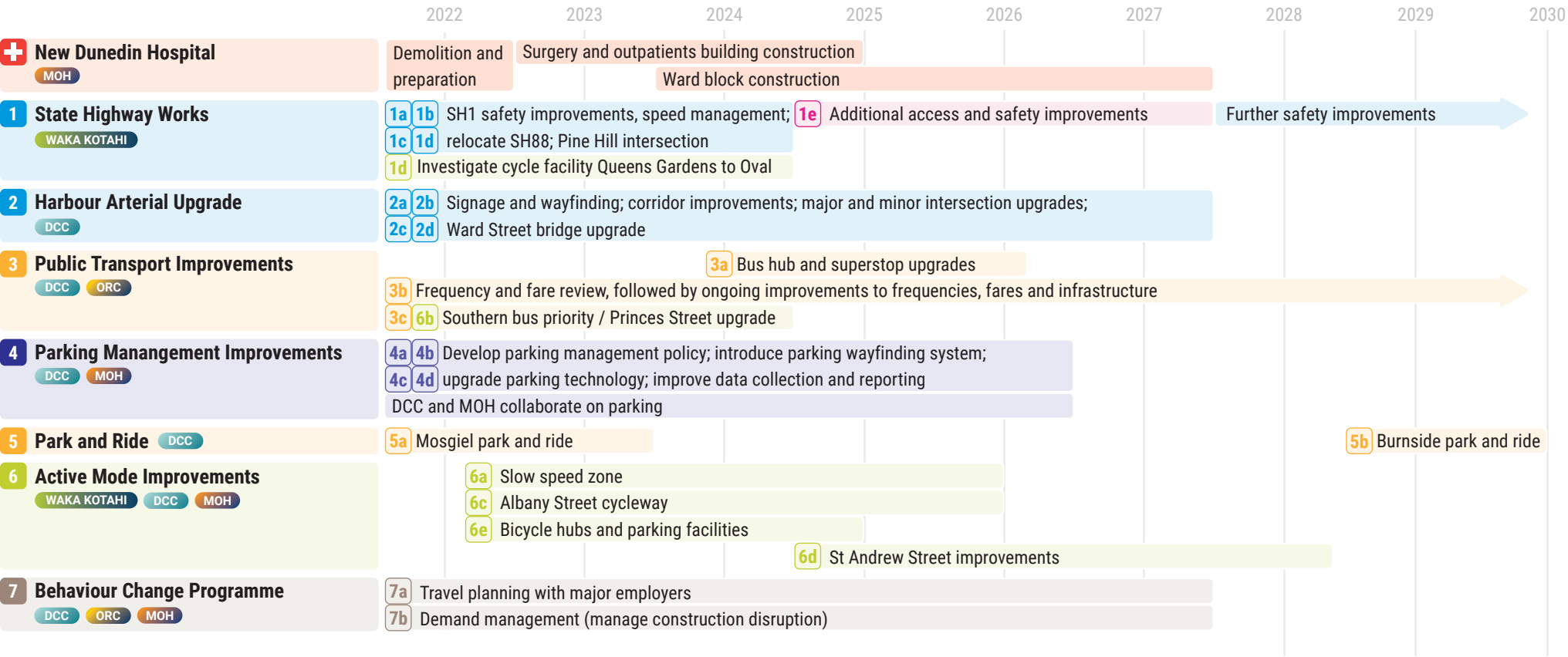
**ORC**  
**DCC**  
**MOH**

**Delivery partners**

- WAKA KOTAHI** Waka Kotahi NZ Transport Agency
- DCC** Dunedin City Council
- ORC** Otago Regional Council
- MOH** Ministry of Health

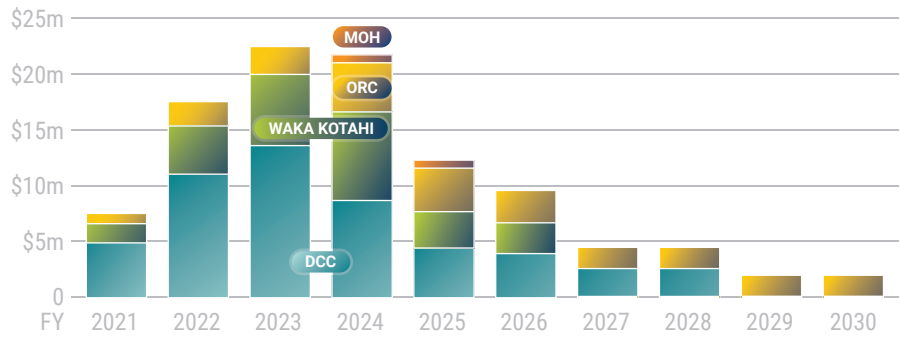
# Shaping Future Dunedin Transport Next Steps

## IMPLEMENTATION TIMELINE

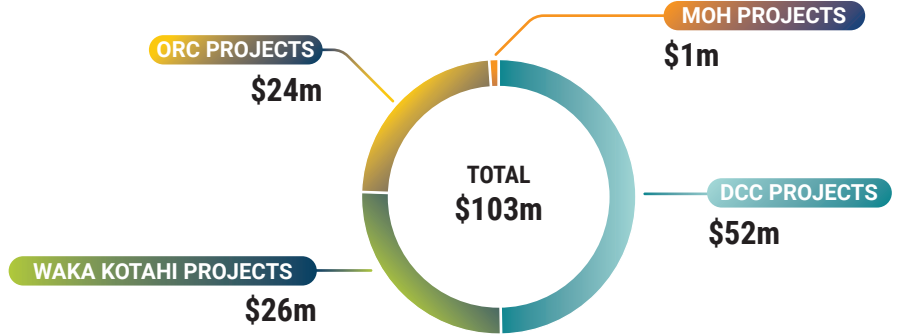


## FUNDING

### Profile over time

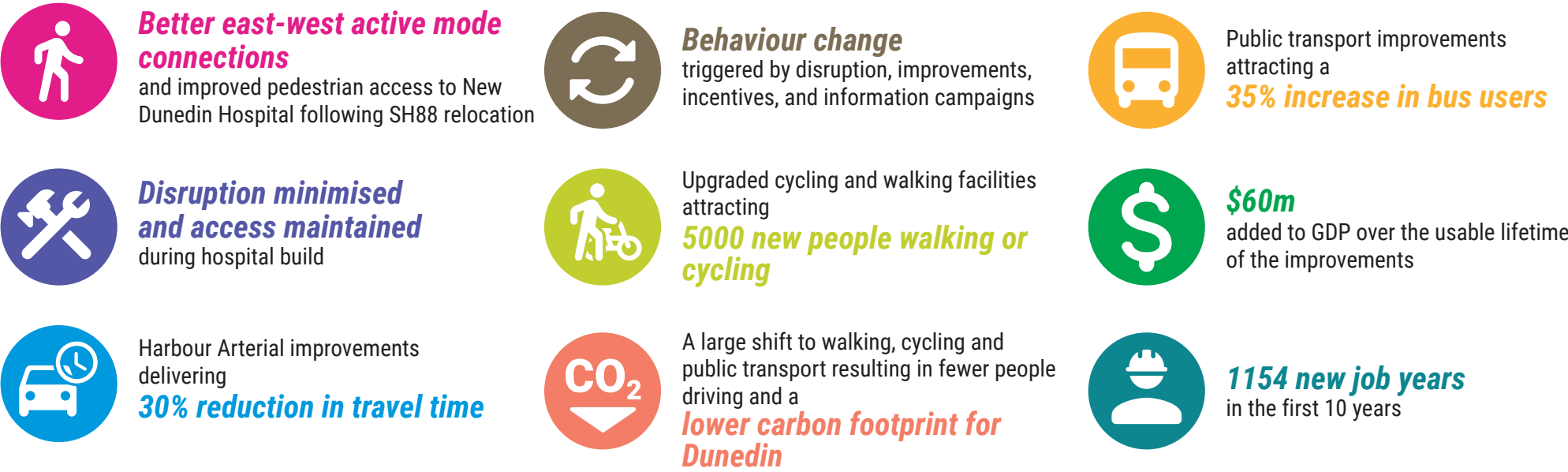


### Total funding provisions

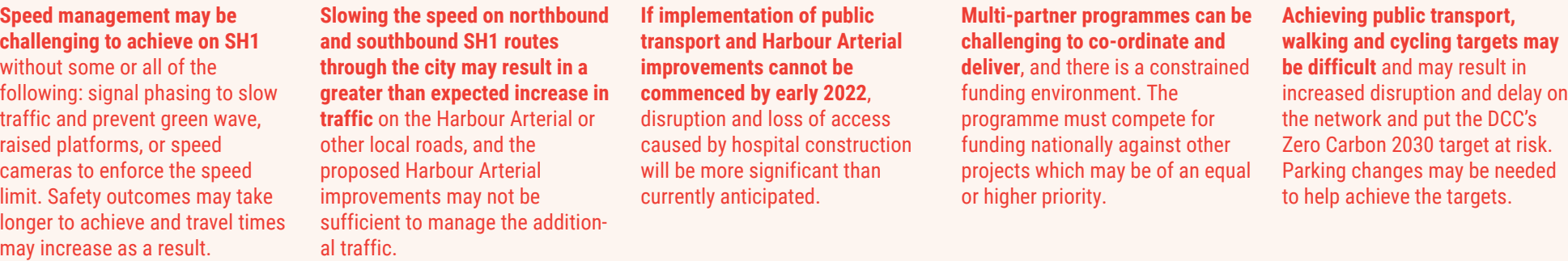


DCC and ORC provisions include Waka Kotahi financial assistance contribution

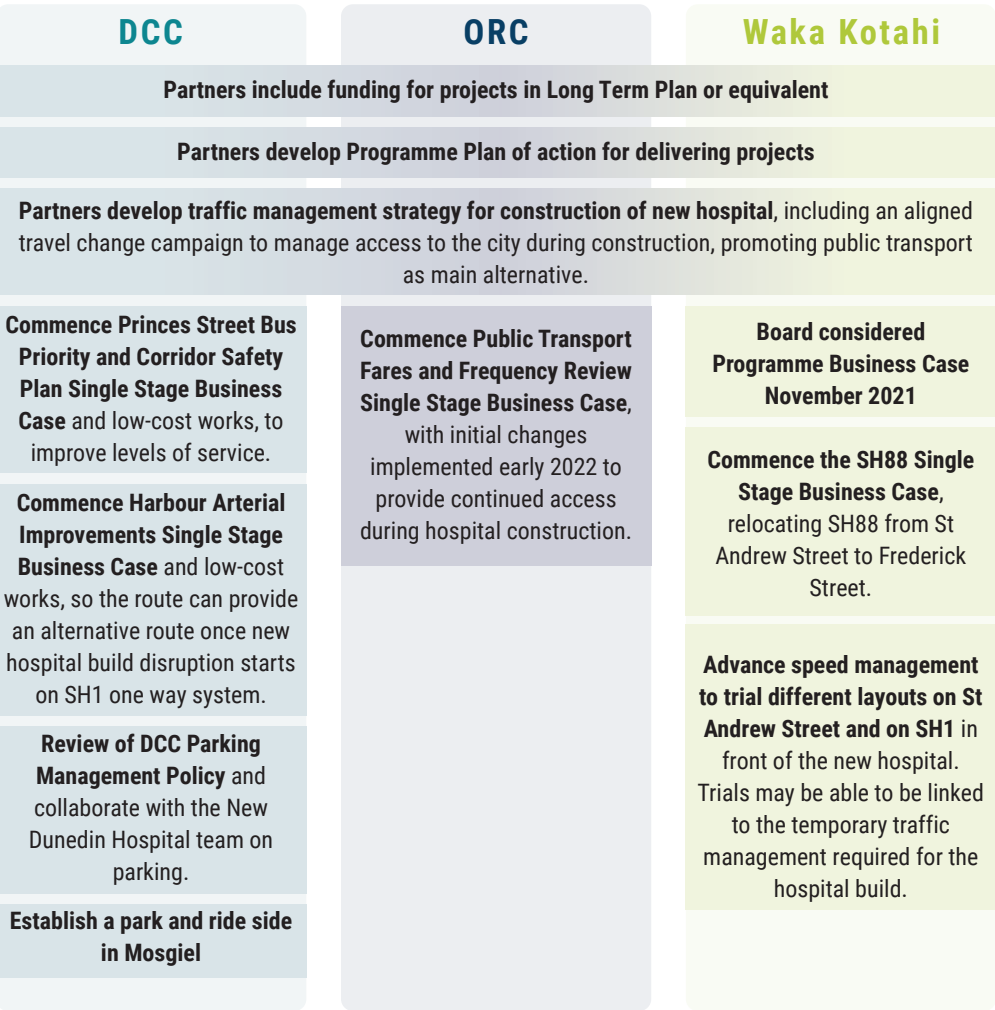
## PROGRAMME OUTCOMES (EXPECTED OVER 10 YEARS)



## RISKS



## NEXT STEPS





**Minute Extract**

**Confidential Council Meeting – 14 December 2021**

**C6 PROGRAMME BUSINESS CASE UPDATE**

A report from Transport provided an update on the Shaping Future Dunedin Transport Programme Business Case.

The General Manager Infrastructure and Development (Simon Drew) and Transport Strategy Manager (Nick Sargent) spoke to the report and responded to questions.

Cr David Benson-Pope left the meeting at 2.30 pm and returned at 2.32 pm.

Cr Christine Garey left the meeting at 2.56 pm.

Moved (Mayor Aaron Hawkins/Cr Marie Laufiso)

That the Council:

**Adjourns** the meeting.

**Motion carried**

The meeting adjourned at 3.00 pm and reconvened at 3.15 pm.

The Mayor withdrew from discussion and Cr Christine Garey assumed the Chair at 3.15 pm.

The Mayor resumed the Chair at 3.17 pm.

Moved (Mayor Aaron Hawkins/Cr Jim O'Malley):

That the Council:

- a) **Supports** Programme 2 version 3 being advanced as the basis for future discussion noting the city's desire for placemaking to be considered in transport infrastructure design;
- b) **Acknowledges** that the final programme design will evolve during discussions;
- c) **Endorses** the Health Impact Assessment and its findings;
- and
- d) **Continues** to advocate to other parties (including ORC and WK) to ensure Shaping Future Dunedin Transport projects are adequately resourced to ensure the success of the overall programme.

Cr Chris Staynes left the meeting at 3.57 pm



Moved (Mayor Aaron Hawkins/Cr Christine Carey):

That the Council:

Adjourns the meeting.

**Motion carried**

The meeting adjourned at 4.16 pm and reconvened at 4.20 pm.

The recommendations were taken separately.

Moved (Mayor Aaron Hawkins/Cr Jim O'Malley):

That the Council:

- a) **Supports** Programme 2 version 3 being advanced as the basis for future discussion noting the city's desire for placemaking to be considered in transport infrastructure design;

**Division**

The Council voted by division:

For: Crs Sophie Barker, David Benson-Pope, Christine Garey, Marie Laufiso, Jim O'Malley, Steve Walker and Mayor Aaron Hawkins (7).  
Against: Crs Rachel Elder, Carmen Houlahan, Mike Lord, Jules Radich and Andrew Whiley (5).  
Abstained: Nil

The division was declared CARRIED by 7 votes to 5

**Motion carried (CNL/2021/001)**

Moved (Mayor Aaron Hawkins/Cr Jim O'Malley):

That the Council:

- b) **Acknowledges** that the final programme design will evolve during discussions

**Motion carried (CNL/2021/002)** with Cr Carmen Houlahan recording her vote against

Moved (Mayor Aaron Hawkins/Cr Jim O'Malley):

That the Council:

- c) **Endorses** the Health Impact Assessment and its findings;

**Division**

The Council voted by division:

For: Crs Sophie Barker, David Benson-Pope, Rachel Elder, Christine Garey, Marie Laufiso, Jim O'Malley, Steve Walker and Mayor Aaron Hawkins (8).  
Against: Crs Carmen Houlahan, Mike Lord, Jules Radich and Andrew Whiley (4).  
Abstained: Nil

The division was declared CARRIED by 8 votes to 4

**Motion carried (CNL/2021/003)**

Moved (Mayor Aaron Hawkins/Cr Jim O'Malley):

That the Council:

- d) **Continues** to advocate to other parties (including Otago Regional Council and Waka Kotahi) to ensure Shaping Future Dunedin Transport projects are adequately resourced to ensure the success of the overall programme.

**Division**

The Council voted by division:

For: Crs Sophie Barker, David Benson-Pope, Rachel Elder, Christine Garey, Marie Laufiso, Jim O'Malley, Steve Walker, Andrew Whiley and Mayor Aaron Hawkins (9).  
Against: Crs Carmen Houlahan, Mike Lord and Jules Radich (3).  
Abstained: Nil

The division was declared CARRIED by 9 votes to 3

**Motion carried (CNL/2021/004)**