



### PALMERSTON NORTH CITY COUNCIL

AGENDA

## **INFRASTRUCTURE COMMITTEE**

#### 1PM, WEDNESDAY 16 MARCH 2022

COUNCIL CHAMBER, FIRST FLOOR, CIVIC ADMINISTRATION BUILDING 32 THE SQUARE, PALMERSTON NORTH

#### MEMBERS

Vaughan Dennison (Chairperson) Susan Baty (Deputy Chairperson) Grant Smith (The Mayor) Brent Barrett Karen Naylor Rachel Bowen Bruno Petrenas Zulfiqar Butt Aleisha Rutherford Lew Findlay QSM Orphée Mickalad Billy Meehan

AGENDA ITEMS, IF NOT ATTACHED, CAN BE VIEWED AT

pncc.govt.nz | Civic Administration Building, 32 The Square City Library | Ashhurst Community Library | Linton Library

Heather Shotter Chief Executive | PALMERSTON NORTH CITY COUNCIL

Te Marae o Hine 1 32 The Square Private Bag 11034 | Palmerston North 4442 | New Zealand pricc.govt.nz





#### **INFRASTRUCTURE COMMITTEE MEETING**

16 March 2022

#### **ORDER OF BUSINESS**

#### 1. Apologies

#### 2. Notification of Additional Items

Pursuant to Sections 46A(7) and 46A(7A) of the Local Government Official Information and Meetings Act 1987, to receive the Chairperson's explanation that specified item(s), which do not appear on the Agenda of this meeting and/or the meeting to be held with the public excluded, will be discussed.

Any additions in accordance with Section 46A(7) must be approved by resolution with an explanation as to why they cannot be delayed until a future meeting.

Any additions in accordance with Section 46A(7A) may be received or referred to a subsequent meeting for further discussion. No resolution, decision or recommendation can be made in respect of a minor item.

#### 3. Declarations of Interest (if any)

Members are reminded of their duty to give a general notice of any interest of items to be considered on this agenda and the need to declare these interests.

#### 4. Public Comment

To receive comments from members of the public on matters specified on this Agenda or, if time permits, on other Committee matters.

(NOTE: If the Committee wishes to consider or discuss any issue raised that is not specified on the Agenda, other than to receive the comment made or refer it to the Chief Executive, then a resolution will need to be made in accordance with clause 2 above.)

#### 5. Confirmation of Minutes

"That the minutes of the Infrastructure Committee meeting of 24 November 2021 Part I Public be confirmed as a true and correct record."

#### 6. Update on the Main Street West Cycleway

Memorandum, presented by Adam Jarvis, Senior Climate Change Advisor and Sandra King, Acting Group Manager - Transport and Development.

#### 7. Asset Management Improvement Plan - Six Monthly Update Page 19

Memorandum, presented by Helen Churton, Manager - Asset Management Planning.

#### 8. Infrastructure Capital Works Dashboard January 2022

Memorandum, presented by Sue Kelly, Acting Manager Project Management Office.

#### 9. Update on Infill Lighting Required to Achieve Compliance in P and V Categories Page 31

Report, presented by Sandra King, Acting Group Manager Transport & Development.

#### 10. Road Maintenance Contract Update

Memorandum, presented by Sandra King, Acting Group Manager Transport & Development.

#### 11.Deliverability Planning in response to Covid - BriefingPage 53

Memorandum, presented by Sarah Sinclair, Chief Infrastructure Officer.

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#### 12. Committee Work Schedule

#### 13. Exclusion of Public

To be moved:

"That the public be excluded from the following parts of the proceedings of this meeting listed in the table below.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under Section 48(1) for passing this resolution

This resolution is made in reliance on Section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by Section 6 or Section 7 of that Act which would be prejudiced by the holding of the whole or the relevant part of the proceedings of the meeting in public as stated in the above table.

Also that the persons listed below be permitted to remain after the public has been excluded for the reasons stated.

[Add Third Parties], because of their knowledge and ability to assist the meeting in speaking to their report/s [or other matters as specified] and answering questions, noting that such person/s will be present at the meeting only for the items that relate to their respective report/s [or matters as specified].



#### PALMERSTON NORTH CITY COUNCIL

#### Minutes of the Infrastructure Committee Meeting Part I Public, held in the Council Chamber, First Floor, Civic Administration Building, 32 The Square, Palmerston North on 24 November 2021, commencing at 1.02pm

MembersCouncillors Vaughan Dennison (in the Chair), Brent Barrett, Susan Baty,Present:Rachel Bowen, Zulfiqar Butt, Lew Findlay QSM, Billy Meehan, Karen<br/>Naylor, Bruno Petrenas, Aleisha Rutherford and Orphée Mickalad.

NonCouncillors Renee Dingwall, Patrick Handcock ONZM, Leonie HapetaMembers:and Lorna Johnson.

**Apologies:** The Mayor Grant Smith (on Council Business).

Councillor Billy Meehan entered the meeting at 1.09pm during consideration of clause 15. He was not present for clause 14.

#### 14-21 Apologies

Moved Vaughan Dennison, seconded Susan Baty.

#### The COMMITTEE RESOLVED

1. That the Committee receive the apologies.

Clause 14-21 above was carried 14 votes to 0, the voting being as follows:

#### For:

Councillors Vaughan Dennison, Brent Barrett, Susan Baty, Rachel Bowen, Zulfiqar Butt, Renee Dingwall, Lew Findlay QSM, Patrick Handcock ONZM, Leonie Hapeta, Lorna Johnson, Orphée Mickalad, Karen Naylor, Bruno Petrenas and Aleisha Rutherford.

#### **Declaration of Interest**

Councillor Vaughan Dennison declared an interest in item 8 (clause 18) but stated he would consider the item with an open mind.

#### 15-21 Presentation – Kāinga Ora

Graeme Broderick, Regional Director and Renee Regal, Community Engagement and Partnerships Manager made a presentation to the Committee to share about their build projects across multi sites in the city.

Kāinga Ora is still a relatively new Crown agency established on 1 October 2019, which brought together Housing New Zealand, KiwiBuild



and Home, Land, Community (HLC). Kāinga Ora manages the State Housing portfolio and support their customers to live well. They also fill the gaps in the private sector in terms of affordable and market housing.

Kāinga Ora own or manage more than 67,980 properties and house 190,000 people. Their two key roles are to be a world-class public housing landlord and to partner to deliver urban development projects of all sizes.

Mr Broderick presented a graph showing the Ministry of Social Development's social housing register over the last five years with 72 registered applications in June 2016 and 729 in June 2021. Their ability to house people on the register is quite challenging as the number of customers moving out of their homes has almost halved over that period.

More state homes are being built in Palmerston North for the people and families most in need of housing. To date they have built over 80 new homes in Palmerston North City and have another 200 homes in their development pipeline, either under construction or in the planning/feasibility stages.

Councillor Billy Meehan entered the meeting at 1.09pm.

Moved Vaughan Dennison, seconded Susan Baty.

#### The **COMMITTEE RESOLVED**

1. That the Infrastructure Committee receive the presentation for information.

Clause 15-21 above was carried 15 votes to 0, the voting being as follows:

#### For:

Councillors Vaughan Dennison, Brent Barrett, Susan Baty, Rachel Bowen, Zulfiqar Butt, Renee Dingwall, Lew Findlay QSM, Patrick Handcock ONZM, Leonie Hapeta, Lorna Johnson, Billy Meehan, Orphée Mickalad, Karen Naylor, Bruno Petrenas and Aleisha Rutherford.

#### 16-21 Confirmation of Minutes

Moved Vaughan Dennison, seconded Patrick Handcock ONZM.

#### The **COMMITTEE RESOLVED**

1. That the minutes of the Infrastructure Committee meeting of 27 October 2021 Part I Public be confirmed as a true and correct record.

Clause 16-21 above was carried 14 votes to 0, with 1 abstention, the voting being as follows:

#### For:

Councillors Vaughan Dennison, Brent Barrett, Susan Baty, Rachel Bowen, Zulfiqar Butt, Lew Findlay QSM, Patrick Handcock ONZM, Leonie Hapeta, Lorna



Johnson, Billy Meehan, Orphée Mickalad, Karen Naylor, Bruno Petrenas and Aleisha Rutherford.

#### Abstained:

Councillor Renee Dingwall.

#### 17-21 Papaioea Place Redevelopment Six-Monthly Update

Memorandum, presented by Bryce Hosking, Manager - Property.

Moved Vaughan Dennison, seconded Aleisha Rutherford.

#### The COMMITTEE RESOLVED

1. That the report titled `Papaioea Place Redevelopment Six-Monthly Update' presented to the Infrastructure Committee on 24 November 2021 be received for information.

Clause 17-21 above was carried 15 votes to 0, the voting being as follows:

#### For:

Councillors Vaughan Dennison, Brent Barrett, Susan Baty, Rachel Bowen, Zulfiqar Butt, Renee Dingwall, Lew Findlay QSM, Patrick Handcock ONZM, Leonie Hapeta, Lorna Johnson, Billy Meehan, Orphée Mickalad, Karen Naylor, Bruno Petrenas and Aleisha Rutherford.

#### 18-21 Tamakuku Terrace Six-Monthly Update

Memorandum, presented by Bryce Hosking, Manager - Property.

Moved Vaughan Dennison, seconded Leonie Hapeta.

#### The **COMMITTEE RESOLVED**

1. That the report titled 'Tamakuku Terrace Six-Monthly Update' presented to the Infrastructure Committee on 24 November 2021, be received for information.

Clause 18-21 above was carried 15 votes to 0, the voting being as follows:

#### For:

Councillors Vaughan Dennison, Brent Barrett, Susan Baty, Rachel Bowen, Zulfiqar Butt, Renee Dingwall, Lew Findlay QSM, Patrick Handcock ONZM, Leonie Hapeta, Lorna Johnson, Billy Meehan, Orphée Mickalad, Karen Naylor, Bruno Petrenas and Aleisha Rutherford.

#### Note:

Councillor Vaughan Dennison declared an interest in the above clause but stated he would consider the item with an open mind.

#### 19-21 Committee Work Schedule

Moved Vaughan Dennison, seconded Bruno Petrenas.

#### The COMMITTEE RESOLVED

1. That the Infrastructure Committee receive its Work Schedule dated November 2021.



Clause 19-21 above was carried 15 votes to 0, the voting being as follows:

For:

Councillors Vaughan Dennison, Brent Barrett, Susan Baty, Rachel Bowen, Zulfiqar Butt, Renee Dingwall, Lew Findlay QSM, Patrick Handcock ONZM, Leonie Hapeta, Lorna Johnson, Billy Meehan, Orphée Mickalad, Karen Naylor, Bruno Petrenas and Aleisha Rutherford.

The meeting finished at 1.50pm

Confirmed 16 March 2022

Chairperson



#### MEMORANDUM

TO:	Infrastructure Committee
MEETING DATE:	16 March 2022
TITLE:	Update on the Main Street West Cycleway
PRESENTED BY:	Adam Jarvis, Senior Climate Change Advisor and Sandra King, Acting Group Manager - Transport and Development
APPROVED BY:	David Murphy, Chief Planning Officer
	Sarah Sinclair, Chief Infrastructure Officer

#### **RECOMMENDATION(S) TO INFRASTRUCTURE COMMITTEE**

1. That the Chief Executive direct Officers to report back to the Committee on community feedback to a permanent design solution, and the final design detail, before implementation.

#### 1. ISSUE

Following public consultation, the Urban Cycle Network Masterplan 2019 confirmed Main Street West/Pioneer Highway as a priority route for the development of a separated cycleway.

In April 2021, Council successfully gained 90% co-funding from Waka Kotahi (NZTA) Innovating Streets programme to deploy a trial version of a cycleway along this route, between the intersection of Pitt Street and Botanical Road, using coloured planter boxes and other materials as separators.

Prior to the deployment of the trial cycleway, extensive engagement was conducted with the community. Officers conducted two public workshops in late 2020 that were promoted on social media, dropped letters to every business and residence within a 100m radius of the site, and visited every adjacent business in person to gain their feedback on the proposed design.

Officers were aware that, given the range of other demands on people's time and attention, proposals often don't 'become real' in the minds of people until they can be seen. Consequently, Officers designed the trial with a high level of flexibility within the design, most notably in the way planter boxes were not fixed to the ground, allowing them to be quickly and easily moved in response to feedback.

Immediately after the implementation of the trial, Officers received a large volume of feedback from the community. Many cyclists were satisfied with the increased safety they enjoyed along the physically separated cycleway, while other road users voiced their concerns about a range of issues, both through social media and the



contact centre. Officers were responsive to the concerns being raised, meeting with numerous people and businesses on-site to discuss the issues further. In most cases, Officers were able to adequately address the issue within 24 hours after it was raised. A fuller examination of these issues is included in the following section.

While the cycleway was initially highly contentious with motorists, negative feedback received reduced with time as users became accustomed to the new road layout and emergent issues were resolved. Conversely, qualitative and quantitative user feedback from cyclists has been extremely positive. Cycle count monitoring showed that user numbers almost tripled within the first month of operation (from 6/hr in November 2020 to 17/hr in May 2021), a notable result given the seasonal differences. Follow up user surveys found that 90% of intercepted cyclists rated it highly positively (overwise neutral), compared with 0% previously (overwise neutral or negative).

A road safety audit conducted by BECA in June 2021 recommended improvements to some moderate and minor issues. This focussed predominantly on risk to life, and found that while the cycleway generally worked well, several issues required resolving. These issues related to intersection conflicts, planter box stability and visibility, narrow cycle lane and on street parking/loading conflicts, drainage maintenance and refuge collection access. To address the issue of planter box stability, Officers tested the fixing of these boxes to the road surface with steel brackets along the stretch of the cycleway adjacent to Railway Reserve. This has proved successful in resolving the issue of planter boxes being tipped into either the traffic lane or cycleway in this locality. However, the visibility issue has not been resolved – driver familiarity has reduced the number of collisions with the planter boxes but not completely eliminated – Officers do not have overall statistics on collisions as they are not always reported to Council.

Overall, a separated cycle facility along Main Street West connecting Pioneer Highway shared path to the city centre, has proven to be successful and confirms this as a strategic priority cycle route as outlined in the Urban Cycle Masterplan. A more permanent design solution will now be considered taking account of the outcomes from the safety review, feedback from both cycle and motor vehicle users, and Officer expertise.

#### 2. BACKGROUND

#### Project Genesis

During the 2020 lockdown period (March – April 2020), a large increase in the volume of cyclists was noted, including many families out with small children. It was also observed that due to the significantly reduced traffic volumes, vehicle speeds were often significantly greater during this period than pre-Covid. This prompted Council Officers to investigate options to improve safety along this and other key routes within the city that were seeing increased use by active modes.

While still in lockdown, Waka Kotahi NZTA announced its 'Innovating Streets for People' contestable fund, which provided a 90% funding assistance rate for local authorities to trial 'people-friendly' spaces, active transport infrastructure, and



tactical urbanism. Council Officers were able to build upon the safety work already underway (as discussed above) and put forward an application containing a suite of strategically aligned projects. Ultimately, Council was highly successful in its application, receiving funding for five projects throughout the city, of which the Main Street West Cycleway was the largest in scope dollar value (\$300,000).

#### Design & Consultation

Officers conducted a series of 'intercept surveys' to gauge existing user sentiment and feedback about conflict points or safety concerns about the existing facility (or lack thereof). Generally, users were highly pessimistic about the level of service provided, telling Officers that they avoided the route at night, took detours to avoid conflict points, and would not allow their children to cycle. Observational surveys saw cyclists frequently being forced into the live traffic lane in order to avoid parked cars and trucks.

A high-level concept design was developed during lockdown, in collaboration with Waka Kotahi (NZTA) and based on the Urban Cycle Network Masterplan. Main Street West/Pioneer Highway had the significant advantage of wider than average lanes (4m+ compared with the usual 3-3.5m), and enough space (6m+) to accommodate both a separated cycleway and parking on the southern side between Pitt Street and West Street. While parking on the northern side would have to be removed in order to provide a separated cycleway, parking surveys indicated that the service lanes and side streets had plenty of spare capacity.

The high-level concept design was shared with the community through two open invite workshops in late 2020, and through in person discussions with businesses and other key stakeholders. During that time feedback was highly positive. Of note was the desire of the Pioneer Shopping Centre businesses to see safety improvements at the West Street/Pioneer Highway Intersection. Council had already been planning a safety upgrade of this intersection and had allocated funding from the Minor Transport Improvements programme to address safety issues at the intersection. This intersection improvement work was subsequently completed early in the 2021/22 financial year.

Once the high-level concept was confirmed, a letter was sent to all businesses and residents along Main Street/Pioneer Highway, as well as to all residents within a city block of the area. Officers also visited every business in person to discuss the proposed changes. Throughout this process, Officers continued to refine the detailed design layout to accommodate user needs where these were raised.

#### Deployment

Rollout of the cycleway began in late March 2021 starting with changes to the road markings. Brightly coloured planter boxes as separators were installed shortly thereafter in early April, beginning with the block alongside Railway Reserve, and installing subsequent sections towards the Botanical Road end over several nights. Substantial communications were also undertaken to make people aware of what was happening.



As stated above, it was anticipated that issues would arise following rollout. Officers paid close attention to feedback via the PNCC Facebook page, which reached over 100,000 views in the first week. Numerous phone calls and correspondence were also received from members of the public during this time. The physical implementation of the cycleway and, particularly how the planter boxes were not fixed to the ground, allowed Officers to respond quickly to issues as they were raised. Adjustments that were made include:

- The installation of a loading zone outside the Pioneer Shops.
- The addition of an extra marked line alongside parallel parking to provide a similar level of service as Featherston Street and other arterial roads in the city.
- Minor changes to the positioning of planter boxes to allow for wider left turns merging with traffic onto Main Street/Pioneer Highway.
- The addition of rumble strips to discourage motorists cutting off cyclists while turning left from Pitt Street into Main Street.
- The trimming of the trees along West Street to improve visibility and personal safety for vehicles displaced from parking along Main Street.
- Swapping out of the darker blue planter boxes for a lighter green colour, and addition of some warning strips to some boxes to improve visibility.

#### Incidents

Prior to installation of the separated cycleway, multiple crashes occurred on the section of Main Street West, between Pitt Street and Botanical Road. Based on information recorded in Waka Kotahi NZTA's Crash Analysis System (CAS), 94 crashes were recorded between 2016 and 2020, resulting in 2 serious and 23 minor injuries.

Of the 94 crashes, 4 resulted in minor injuries to cyclists and 2 minor injuries to pedestrians. All crashes involving cyclists and pedestrians resulted in an injury.

In the period 1 April 2021 to 16 February 2022, since installation of the separated cycleway there have been 4 crashes recorded in CAS, 2 serious and 2 non-injury crashes. Of these, only 1 non-injury crash is related to the cycleway where a driver was driving too close to the separators. We note that the 2 serious injury crashes that occurred on the road were a result of unusual behaviour which could not have been reasonably prevented by road infrastructure. These crashes involved driving over the central median resulting in a head-on and a passenger jumping out of a moving vehicle.

Since installation of the separated cycleway, four incidents have been reported to Council for insurance claims:

- One involving a cyclist hitting a planter box that had shifted into the cycle lane
- Two involving motor vehicles hitting planter boxes
- One third party claim from a motorist who scratched their car on a planter box

The two incidents of vehicle hitting planter boxes involved speed at night, where the driver has lost control of their vehicle and deviated from the lane. In both cases, the driver was relatively unharmed, which likely would not have been the case prior to the cycleway installation should these vehicles have deviated into what was previously a parking lane.



There is also anecdotal evidence of a number of other minor incidences between vehicles and planter boxes, particularly during the early stages of the trial with side access turning movements. Since planter boxes were not fixed to the ground, these incidents have typically resulted in shunting of the planter box into either the cycle or vehicle lanes. This required either Council Officers or the road maintenance contractor to subsequently rectify. The majority of these incidents occurred in the period immediately following installation, while the turning radiuses were smaller, and the planter boxes were still unfamiliar for motorists.

As noted, the movability of the planter boxes, previously an asset allowing rapid changes to be made, has become an issue, with occasional theft and vandalism. The fixing bracket test alongside Railway Reserve has shown the system to be effective at resolving this issue.

#### Road Safety Audit

The project road safety audit took place on 22 June 2021. The audit identified 4 moderate risk issues and 7 minor risk issues. The 4 moderate risks are the main issues to be addressed, outlined as follows:

- 1) Conflict areas at intersections and access along the route
- 2) Narrow on-street parking (Botanical to Shamrock, southern side of the road)
- 3) Planter box visibility and stability as separators between the cycleway and traffic lanes
- 4) Loading zone conflict with the westbound cycleway outside West Street shops

Issues 1) and 2) above were identified previously in the planning stages of the project. These were not addressed as part of the Innovating Streets project as they required significant permanent changes to improve the conflicts, which were considered outside of the project scope. Improvements to these areas will be investigated as a more permanent cycleway solution is formalised.

Regarding issue 3) above, the main issues with the planter boxes were their nighttime visibility (particularly the dark blue planter boxes) and the potential for planter boxes to be dislodged. To address this, the audit recommended that:

- The conspicuousness of the dark coloured planter boxes be improved by replacing with lighter coloured planter boxes
- The planter boxes are fixed into position
- Installation of additional warning signs and markings

The audit indicated that planter boxes that are visible and fixed are appropriate between the cycle lane and car park bays. However, where planter boxes are adjacent to live lanes, the audit recommends alternative separators are investigated.

With respect to issue 4) above, parking was initially removed at this locality as part of this trial project. Despite the conflict with the cycleway, parking was replaced with



a loading zone in order to address the following concerns raised by adjacent businesses including:

- The ability for rubbish to be collected from the kerbside
- Customer parking (particularly larger vehicles)

The audit recommends the removal of the loading zone. Kerbside rubbish collection would need to be resolved within the Council organisation to be safe and effective for collections staff and all road users.

The minor issues identified in the road safety audit are not discussed in detail in this report as they are considered low risk. They include cyclists riding in the opposite direction, vegetation removal to improve visibility, infrastructure and utility condition on the cycleway, pedestrian access across the cycleway, width of the eastbound cycleway, advanced signage and cycle box provision. These issues can be addressed in conjunction with design of permanent improvements.

The road safety audit does not identify any significant road safety risks with the project, although Officers acknowledge the significant public feedback relating to the visibility issue associated with the use of planter boxes as cycle lane separators. There are also no recommendations to significantly change the trial layout. The safety issues raised are moderate or minor risks, which can be addressed in conjunction with design of permanent improvements to the cycleway.

#### Other issues raised

Operational staff also gave feedback on the utility of the planter boxes, in terms of safe manual handling, operational costs of responding to vandalism, and impact on other activities such as waste collection and road sweeping.

#### 3. CONCLUSIONS

The trial separated cycle facility along Main Street West connecting Pioneer Highway shared path to the city centre has proven to be successful and confirms this as a strategic priority cycle route as outlined in the Urban Cycle Masterplan.

A more permanent design solution, including a more sustainable separator treatment, will now be considered taking account of the outcomes from the safety review, feedback from both cycle and motor vehicle users, and technical expertise of Officers. Overall, given both the wider user/community feedback and outcomes from the safety audit with regard to visibility, Officers consider the plastic planter boxes as separators are not an effective separator solution. The trial has proved very useful in informing development of a risk-based approach to determining suitable materials for cycle lane separation.

Whilst a permanent solution is being designed and implemented, Officers recommend that the cycle lane layout is retained so as to consolidate its location for road users. This means that the plastic planter boxes would be retained and fixed in place as a temporary measure recognising that implementation of a permanent solution should progress at pace. Funds are available this financial year.



Implementation of permanent design solution will enable a connection between the city centre to both the Pioneer Highway and Mangaone Stream shared paths. It will also provide connection to cycling infrastructure improvements along Botanical Road and Cook Street, and other cycleway links, including on Park Road and Featherston Street, scheduled for implementation over the 2022/23 and 2023/24 financial years.

Following preliminary design of a permanent cycle lane solution in this location, feedback will be sought from the community to ensure all issues have been taken account of. Officers will report back to this committee on the community feedback received and final design details.

Improvements for cyclists to the remaining section of Main Street West, from Pitt Street to Te Marae o Hine The Square, will be further investigated, including concepts for lowering vehicle speeds. This will integrate the Main Street West cycleway with other city-centre programmes, including Streets for People.

#### 4. COMPLIANCE AND ADMINISTRATION

Does the Committee hav	ve delegated authority to decide?	Yes
Are the decisions signific	ant?	No
If they are significant do	they affect land or a body of water?	No
Can this decision only be	e made through a 10 Year Plan?	No
Does this decision re Consultative procedure?	equire consultation through the Special	No
Is there funding in the cu	rrent Annual Plan for these actions?	Yes
Are the recommendation plans?	ns inconsistent with any of Council's policies or	No
The recommendations c	ontribute to Goal 1: An Innovative and Growing	City
The recommendations Transport	contribute to the achievement of action	n/actions in
The actions are:		
• Deliver the Urban	Cycle Network Masterplan	
<ul> <li>Develop, maintain network to delive Government Polici</li> </ul>	n, operate and renew the active and pub er on Council goals, the purpose of this plo y Statement on Transport	lic transport an, and the
<ul> <li>Prioritise active tr purpose of this pla</li> </ul>	ransport programmes that deliver on Counci In, and the Government Policy Statement on Tro	l goals, the ansport
Contribution to The I strategic Cycle direction and to sepa social, and economic, the p	Main St Separated Cycleway was identified in e Network Masterplan as a high-priority r rated facility. This facility delivers not only on th the general direction of the Transport Plan, bu partnership with Waka Kotahi, directly to the G	n the Urban oute for a lat outcome it also given .PS Transport



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being	

#### ATTACHMENTS

Nil



#### MEMORANDUM

TO:	Infrastructure Committee
MEETING DATE:	16 March 2022
TITLE:	Asset Management Improvement Plan - Six Monthly Update
PRESENTED BY:	Helen Churton, Manager - Asset Management Planning
APPROVED BY:	Sarah Sinclair, Chief Infrastructure Officer

#### **RECOMMENDATION(S) TO INFRASTRUCTURE COMMITTEE**

- 1. That the Committee note the progress of the Asset Management Improvement Plan made over the five-month period October 2021-February 2022.
- 2. That the Committee note an update of the Asset Management Maturity Assessment is scheduled for 2022 and that will measure the progress of asset management practice since 2019.
- 3. That the Committee note that after the update of the Asset Management Maturity Assessment the Asset Management Improvement Plan will be revised as part of the continual evolution of the Improvement Plan.

#### 1. ISSUE

- 1.1 The purpose of this report is to update Elected Members on the progress of the organisational Asset Management Improvement Plan (AMIP).
- 1.2 AMIP updates are usually provided to Council on a six-monthly basis. However, this report covers a shorter five-month period to allow for a correction in report scheduling.
- 1.3 The goal of asset management is 'to meet a required level of service, in the most cost effective manner, through the management of assets for present and future customers'<sup>1</sup>. Improving asset management practice will result in better focus of expenditure, both capital and operational, and reduced risk of asset failure.
- 1.4 In order to effect lasting improvements in asset management practice the changes need to be fully considered and carefully managed. Long-term permanent organisational change to asset management practice will take considerable time. The current AMIP is expected to take 5 to 7 years to work through. In practice it will never be completed as it continually evolves as asset management approaches mature.

<sup>&</sup>lt;sup>1</sup> International Infrastructure Management Manual, Version 6.0, 2020, National Asset Management Support (NAMS).



1.5 An update of the Asset Management Maturity Assessment (AMMA) is scheduled for 2022. The outcomes of the AMMA and any significant revisions to the AMIP will be advised in the next update report scheduled post October 2022.

#### 2. BACKGROUND

- 2.1 Officers last provided Elected Members with an update on the progress of the AMIP in October 2021. Details were provided on a selection of AMIP programmes as well as the summary schedule for 2021-2024. A previous update provided in September 2020 presented the findings of the 2019 AMMA.
- 2.2 The full current AMIP includes 343 individual improvement items. These individual improvement items have been categorised into 75 programmes based on commonality of items and stakeholders. These workstreams have then been prioritised and scheduled to create an improvement work portfolio.
- 2.3 Inputs to the AMIP come from a wide range of relevant stakeholders and sources including:
  - AMMA
  - Asset Management Plans (AMPs)
  - Strategic Asset Management Plan (SAMP)
  - Valuation Audits
  - Operational experiences / reporting
  - Recommendations from the Business Assurance Division
  - Industry best practice guidelines and audits, e.g. Waka Kotahi
- 2.4 As well as being a key input into the development and prioritisation of the AMIP the AMMA is the tool used to audit improvement of AM practice. Council conducts an AMMA every three years to progressively measure AM practice. The previous AMMA was conducted in August 2019 and assessed Council's overall level of AM Maturity as 'Core'.
- 2.5 Budget was allocated in the 2021-31 10-Year Plan (10YP) to enable the AMIP actions to be implemented. This is the first time that Council has allocated budget and operationalised asset management improvements in order to gain the benefits of improved asset management practice.

#### 3. IMPLEMENTATION AND PROGRESS OF ASSET MANAGEMENT IMPROVEMENT PLAN

- 3.1 Since the October 2021 report to Council, work has been focused on implementing the highest priority AMIP items.
- 3.2 The following table compares progress on the AMIP from the October 2021 report with current progress.



Date	# Programmes	Progress/Notes
October 2021	48	Complete = 1
		Underway = 28
		Scheduled to finish in year $1 = 16$
February 2022	50	Complete = 1
		Underway = 40
		Scheduled to finish in year $1 = 16$

- 3.3 Two additional programmes have been brought into the AMIP. These are a programme to improve as-built processes and the programme of improvement items from historic Waka Kotahi audits. Both programmes were already ongoing but have been recognised as relating to improvement in AM practice and so have been brought into the AMIP.
- 3.4 Analysis of progress shows that across the entire plan we are marginally behind the target dates that we have set ourselves. This is due to the factors detailed above and the challenges listed below. Importantly, we are making steady progress on programmes to improve our level of maturity, which will be the long term measurement of success.
- 3.5 There have been some challenges to progressing the plan. While none of the challenges are insurmountable, they have required additional time for consideration and planning. In some cases, they have required potentially new and different ways of working that typically require additional time resources.
  - Availability of input from staff, recognising the demands on the rest of the organisation, particularly at a time when resources are extremely stretched. Programmes are progressively being started only when there is enough capacity to provide input. This is a risk to the AMIP that has yet to be fully quantified.
  - Ongoing pressures of working in a COVID-19 environment. Collaborative working remotely, accessing external consultants and securing resourcing needed is presenting challenges. However, we are managing to work through these issues at present and are monitoring ongoing risk to the AMIP.
- 3.6 In the previous report details were provided on a selection of programmes begun in 2021/22. Updates on these specific programmes are provided below.

#### Growth Programme Processes (PROG-027)

This programme includes development of a process with the Strategic Planning Unit to regularly review timing of growth programmes and planned infrastructure investment. Also, how planned growth will be allowed for by the various activities of Council, including ongoing lifecycle planning and budgeting for new assets.



**AM practice benefit:** Improved budget profile for growth programme budgets in 10YP and Annual Plans.

**Update:** A process for reviewing the growth timelines has been drafted, and is being finalised.

#### Criticality Process: Critical Assets Defined and Flagged (PROG-034 and 035)

These two programmes involve the development of a framework that will enable consistent determination of criticality across networks and assets. This includes what is critical to provide services and to deliver on Council's strategic direction. Once the framework is established it will be used to confirm the level of criticality of each of Council's assets.

**AM practice benefit:** Improved focus of effort and budget for condition assessment and renewal to reduce risk of failure of critical assets.

**Update:** The pan - infrastructure asset criticality framework is in draft. Activity specific criticality frameworks are being developed for water, wastewater, stormwater, facilities, roading and plant assets (rubbish and recycling, water and wastewater and facilities asset components).

#### Condition and Performance Policies (PROG-036)

This comprises work to formalise our policies governing asset condition and performance, including our definitions of acceptable condition and performance for various assets with various functions.

**AM practice benefit:** Improved financial planning for renewal and replacement of assets.

**Update:** An initial workshop to determine scope and gather input has been completed. The programme is due for completion in 2022.

#### Data Reporting (PROG-044)

This programme involves the use of a business analytics software solution to improve reporting and analytical insights into our asset data.

AM practice benefit: Better data led decision-making.

**Update:** Work to set up a foundation to allow data to be sourced from different databases is complete. A reporting server is in place and Power BI reports for the business are beginning to be produced.

#### Mobile Data Collection (PROG-042)

This comprises work to investigate the best mobile data solutions for capturing changes (maintenance, renewal, disposal) and condition to our assets while out in the field. This programme will enable real time and increasingly accurate updates to our asset databases.

AM practice benefit: Better accuracy data for decision-making.

**Update:** There are some enabling works that are required. These are underway.



#### Financial Information in Asset Management Information Systems (PROG-049)

This programme aligns the capture of asset information in our asset databases with the Finance Unit's Fixed Asset Register. Better alignment between the asset databases and the Fixed Asset Register will drive greater efficiency in our asset valuation process.

AM practice benefit: Improved financial planning for replacement and renewal.

**Update:** The asset planning division and the Finance Team are working together to identify solutions with the aim of improving alignment between the two systems.

#### Maintenance Strategy and Plan Development (PROG-054)

This work formalises operational strategies and plans for maintaining our asset condition and performance. This programme includes 13 elements of maintenance planning and documentation.

**AM practice benefit:** Improved future work scheduling and budgeting for maintenance and renewals.

**Update:** This is a long term project – the first component (pump station standards) has been completed.

#### Disposal Process (PROG-063)

Formal disposal plans for the disposal of all kinds of assets are being developed. These include how assets are physically disposed of, and how the disposal is treated in our AM Information Systems as well as the financial system.

**AM practice benefit:** Improved management of the lifecycle of assets resulting in improved financial planning.

**Update:** An initial workshop to determine scope and gather input has been completed. The project is due for completion in 2022.

#### 4. OVERALL ASSET MANAGEMENT IMPROVEMENT PLAN SCHEDULE

- 4.1 Collectively the improvement items in this iteration of the AMIP represent a large body of work that it is anticipated will take 5 to 7 years to work through. Significant, sustained and coordinated effort over time is required to fulfil Council's goal of advancing its level of AM maturity.
- 4.2 The programme will also be subject to change over time. All the inputs to the AMIP are subject to revision many need to conform to a legislated cycle of revision. As asset management practice progressively improves and these inputs are revised it will result in the identification of new and additional areas of improvement that need incorporation into the AMIP. Thus, the AMIP will need to be continually updated in response to revisions in its inputs, and these will be reflected in these updates to Elected Members.



- 4.3 The AMMA scheduled for 2022 is one such input. It will provide Council with a measurement of current asset management maturity and progress since the last AMMA. Recommendations from the AMMA will be used to review and update the AMIP. Changes will be advised in the next update report scheduled post October 2022.
- 4.4 Despite careful programming and prioritisation of the AMIP there is some uncertainty about the timing of the schedule and quantum of work that remains. This is because it is the first time that an AMIP has been operationalised. We are anticipating that these things will become clear as we implement the AMIP and as it is revised.
- 4.5 Uncertainty regarding timing is also influenced by the nature of the projects involved. While some of the improvement items are transactional in nature and relatively straightforward to schedule, others rely on relationships and availability of experts across Council. Many of the AMIP items involve organisational, process and policy change across Council. Change management is an emerging issue and will continue to inform our strategy to progress the AMIP, because the capability to absorb and give effect to the change associated with AMIP tasks will vary across the different parts of the organisation at different times.
- 4.6 To avoid timing delays it will be important that there is alignment between the AMIP programme and development of the 2024/34 ten year plan. While integration of the AMIP and ten year plan has been programmed and planned for, any time delays experienced in either project could impact on successful timing and completion of both projects, although the teams are working closely together.

#### 5. COMPLIANCE AND ADMINISTRATION

Does the Committee have delegated authority to decide?	
If Yes quote relevant clause(s) from Delegations Manual: 167.2	Yes
Are the decisions significant?	No
If they are significant do they affect land or a body of water?	No
Can this decision only be made through a 10 Year Plan?	No
Does this decision require consultation through the Special Consultative procedure?	No
Is there funding in the current Annual Plan for these actions?	Yes
Are the recommendations inconsistent with any of Council's policies or plans?	No
The recommendations contribute to Goal 4: An Eco City	
The recommendations contribute to the achievement of action/actions	in Waters
The action is: gain a better understanding of the condition of infrastructure to create clear direction on upgrades and renewals require	wastewater ed.



Contribution to	The Asset Management Improvement Plan will enable
strategic	operationalisation of improvement items relating to the
direction and to	development of a coherent and coordinated asset condition
social,	programme. The asset condition programme will lead to a better
economic,	understanding of our assets and inform optimised decision-
environmental	making relating to upgrades and renewals of assets.
and cultural well-	
being	

#### **ATTACHMENTS**

Nil



#### MEMORANDUM

TO:	Infrastructure Committee
MEETING DATE:	16 March 2022
TITLE:	Infrastructure Capital Works Dashboard January 2022
PRESENTED BY:	Sue Kelly, Acting Manager Project Management Office
APPROVED BY:	Sarah Sinclair, Chief Infrastructure Officer

#### **RECOMMENDATION(S) TO INFRASTRUCTURE COMMITTEE**

1. That the Committee receive the memorandum titled 'Infrastructure Capital Works Dashboard January 2022', presented to the Infrastructure Committee on 16 March 2022.

#### 1. PURPOSE OF REPORT

To provide the January 2022 dashboard update on the delivery of the Infrastructure capital new and capital renewal projects.

#### 2. BACKGROUND

Whilst work is progressing, the combined impacts of Covid and delays with Waka Kotahi funding mean that work is tracking approximately 4 months behind across much of the portfolio. A high level summary of all issues causing programme delay is provided and mitigation strategies being undertaken are noted.

#### 3. NEXT STEPS

Work will continue to mitigate risks and deliver projects.

#### 4. COMPLIANCE AND ADMINISTRATION

Does the Committee have delegated authority to decide?	Yes
Are the decisions significant?	No
If they are significant do they affect land or a body of water?	No
Can this decision only be made through a 10 Year Plan?	Νο
Does this decision require consultation through the Special Consultative procedure?	No
Is there funding in the current Annual Plan for these actions?	Νο
Are the recommendations inconsistent with any of Council's policies or plans?	No



The recommendations contribute to Goal 5: A Driven & Enabling Council The recommendations contribute to the achievement of action/actions in Governance and Active Citizenship The action is: to enable Council to exercise governance by reviewing financial and operating performance of the Instructure Unit Capital Works programme The recommendations contribute to the achievement of Contribution to action/actions in a plan under the Driven and Enabling Council strategic direction and to Strategy social. economic, environmental and cultural wellbeing

#### ATTACHMENTS

1. Infrastructure Capital Works Dashboard January 2022 🗓 1

S DASHBOARD	mmary Financial Year 20/21Capital Works Dashboard	Progress	Complete	<b>Construction Complete</b> ; the community have access to the upgraded facility	Commencing the tender process February	Detailed design underway	Multi year programme. <b>Upgrades commenced</b> n January 2022	Construction underway	The Duplicate Main is in service	Cloverlea due for completion February Bunnythorpe deferred owing to budget constraints	Commissioning planned to commence late February	Commencing tender process early March for water, wastewater and roading	TO A CONTRACT OF
STRUCTURE CAPITAL WORKS	Progress with key projects identified in the Sur	Project	Esplanade and Park Road intersection	Bunnythorpe Community Centre	Animal Shelter – New Building	Fitzherbert Women's Changing Room Upgrade	Social Housing - Healthy Homes Compliance	Turitea Pa Site	Turitea Duplicate Main	Cloverlea Roundabout Upgrade Railway/ Bunnythorpe Road Intersection Upgrade	Railway Road Bore – Chemical and Pump Building	Urban Growth - North East Industrial Zone (NEIZ)	
INFRA		58 Projects have been	completed		<b>373</b> Projects are in train	228 Capital new	166 Capital renewal		Projects completed or in progress	500 400 300	200	0 Renewals Capital New	Projects in progress Projects completed

200 100 0

## **ITEM 8 - ATTACHMENT**

JANUARY 2022 January 10 programmes Budget V Spend January 22 and a provincient of delay to capital and capital renewal programmes when a provincient start activity to programmes of truncing confirmation has resulted in an approximately 4 month delayed construction start activity and delaye activity progress and delayed construction start activity and delaye and civil and construction start activity and delayer activity in both capital new and delayed construction start activity and delayer activity in both capital new and interstructure staff copacity and copacity and capital in a delayer and civil and construction start activity of a statiled workers across multiple areas memory activity and activity and copacity and copacity and copacity and copacity and copacity and copacity and copacity and copacity and copacity and activity activity activ		<ul> <li>Earlier contractor involvement on projects with identified buildability constraints where appropriate</li> <li>Early purchase of long lead items to mitigate supply chain delays Down and the supply chain delays Down and a supply cha</li></ul>	• A design panel is being established for the design of 3 waters and transport projects	s been spent to date Pipe Supply -pipes used by our in house construction teams Pipe Lining - delivered under DIA funding Mechanical and Electrical work for 3 waters and transport	<ul> <li>Sperit \$M = Budget \$M</li> <li>Securing suppliers by <b>bundling contracts</b> of work across programmes and over <b>multiple</b></li> <li>Years. To date contracts are being developed for;</li> </ul>	<ul> <li>The Roading Maintenance Contract with Fulton Hogan is up and running and delivering</li> <li><sup>20</sup> <sup>40</sup> <sup>60</sup> <sup>80</sup> <sup>100</sup> <sup>120</sup> <sup>120</sup> roading maintenance and some capital renewal works</li> </ul>	What we are doing to reduce the impact of delays	• Infrastructure staff capacity and capability as a result of vacancies across multiple areas exacerbated by a national shortage of skilled workers across many areas	<ul> <li>Market constraints include consultant availability, supply chain delays and civil and construction contractor capacity have resulted in delayed delivery in both capital new and renewal programmes of work</li> </ul>	Budget v Spend January 22 • Covid 19 level 4 lockdown at the beginning of the financial year slowed early progress and delayed construction start dates	Waka Kotahi late release of funding confirmation has resulted in an approximately 4 month delay to programmes	Causes of delay to capital and capital renewal programmes	<ul> <li>addiversity includes consultant availability, supply chain delays and civil and construction start dates</li> <li><b>Market constructions fairt dates</b></li> <li><b>Market constructions for date</b></li> <li><b>Market constructions for date</b></li> <li><b>Market constructions of work</b></li> <li><b>Infrastructure</b> staff capacity have resulted in delayed delivery in both capital new and renewal programmes of work</li> <li><b>Infrastructure</b> staff capacity and capability as a result of vacancies across multiple areas exceeded by a national shortage of skilled workers across many areas</li> <li><b>Infrastructure</b> staff capacity and capability as a result of vacancies across multiple areas exceeding to reduce the impact of delayed delivery in both capital new and contage of skilled workers across many areas</li> <li><b>Interstructure</b> staff capacity and capability as a result of vacancies across multiple areas exceeding maintenance and some capital renewal works</li> <li><b>The Roading Maintenance Contract with</b> Fulton Hogan is up and running and delivering roading maintenance and some capital renewal works</li> <li><b>Securing suppliers by bundling contracts</b> of work across programmes and over <b>multiple years</b>. To date contracts area being developed for,</li> <li><b>Steel Trees</b> - split tinto 2 contracts construction teams if ple slupply -pipes used by our in house construction teams if ple slupply -pipes used by our in house of some construction teams if ple slupply -pipes used by our in house of some random delayed for the design of 3 waters and transport projects if ple slupply -pipes used by our in house of a denayed under DA funding Mechanical and Electrical work for 3 waters and transport projects appropriate</li> <li><b>Early purchase</b> of long lead items to militable supply chain delay <b>Point</b></li> </ul>
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# **ITEM 8 - ATTACHMENT 1**



#### MEMORANDUM

TO:	Infrastructure Committee
MEETING DATE:	16 March 2022
TITLE:	Update on Infill Lighting Required to Achieve Compliance in P and V Categories
PRESENTED BY: APPROVED BY:	Sandra King, Acting Group Manager Transport & Development Sarah Sinclair, Chief Infrastructure Officer

#### **RECOMMENDATION(S) TO INFRASTRUCTURE COMMITTEE**

1. That the Committee be provided with the next annual update for Programme 1367 in March 2023.

#### 1. OVERVIEW

- 1.1 Council approved a seven-year programme of work for Street Light Infill Improvements (Programme 1367) within the 2018-28 10 Year Plan. This was to fund upgrading of lighting to address non-compliance in terms of the light levels provided by the current pedestrian (P) and vehicle (V) category streetlights across the city. The programme of work started in 2018-19 and is currently scheduled to be completed in 2024-25.
- 1.2 Council requested regular updates on programme progress through the implementation of the programme of work. Officers have previously reported on this programme to the Finance & Performance Committee of Council in August 2019 and the Infrastructure Committee of Council on 2 September 2020. Both committees have requested an annual update on programme progress be provided following the completion of each subsequent year of work.
- 1.3 This report provides an update of progress achieved to date, specifically progress in 2020-21 (Year 3 of the 2018-28 10 Year Plan), and external funding issues over the first three years of the 2021-31 10 Year Plan.

#### 2. BACKGROUND AND PREVIOUS COUNCIL DECISIONS

2.1 Following adoption of the 2018-28 10 Year Plan, Programme 1367 – Streetlight Infill Improvements was allocated a total budget of \$5,734,000 spread over 7 years as detailed in Table 1 below. The programme was approved for NZTA co-funding under the 'Low Cost Low Risk' category as part of the 2018-21 National Land Transport Programme (NLTP) and was included as a roading programme in the Regional Land Transport Plan. NZTA funding of 51% was



approved provided the programme of work in any one year did not exceed \$1m.

- 2.2 The adoption of the Council's 2021-31 10 Year Plan continued the funding of the programme of works, with a revised total budget for the remaining 4 years of the programme of \$3,341,000, with assumed NZTA co-funding.
- 2.3 On 7 September 2021 Council was advised by NZTA that co-funding for this Infill Street Lighting programme over the 2021-24 NLTP period was not available. At Council's Finance & Audit Committee meeting of 24 November 2021, Council resolved to:

"For the un-funded Low Cost Low Risk (LCLR) programmes within the 2021-24 NLTP period, that Council confirms that:

b. For Infill Street Lighting (programme 1367) provide additional capital borrowing of \$431k in 2021-22 (of \$1.32M three-year programme) to fund NZTA share to deliver the whole programme."

- 2.4 As advised in the previous report, following the implementation of the first two years of the programme, Officers had a better understanding of the scope and costs of work. Adjustments to the scope of works were undertaken to provide for additional items, remove low level non-compliances areas (levels so small an upgrade is not justified), and remove all upgrades within the State Highway network through the city (as these are being managed by NZTA). Using this information, the remaining programme was re-costed and incorporated into the adopted 2021-31 10 Year Plan.
- 2.5 The budgets, and actual expenditure for the first three years of the programme now completed, are detailed in Table 1 below.

	2018-2	28 10 Year	Plan	2021-			
Year	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Council LTP Budget	\$446k	\$865k	\$865k	\$846k	\$896k	\$923k	\$676k
Council share (49%)	\$219k	\$424k	\$424k	\$415k	\$439k	\$452k	\$331k
Waka Kotahi (NZTA) share (51%)	\$227k	\$441k	\$441k	\$0	\$O	\$0	\$0 estimat ed
Additional Borrowing to fund assumed Waka Kotahi share	\$O	\$0	\$0	\$431k	\$457k	\$471k	\$345k
Actual Expenditure	\$507k	\$812k	\$924k	\$13k^			

 Table 1: Capital New Programme 1367 - Streetlight Infill Improvements

^Expenditure to Dec 21 after funding allocated in November 21



#### 3. PROGRESS AND EXPENDITURE UPDATE – 2020-21

- 3.1 The financial year 2020-21 was the third year of implementation of Programme 1367 and had an allocated budget of \$865,000. Generally, the work comprised construction of the current year's planned work, and design for the next financial year, noting that design for 2020-21 was undertaken in 2019-20. The work is undertaken in packages with several adjacent streets in an area being upgraded in each package.
- 3.2 Procurement of the programme of work was to be based around the establishment of a panel of contractors, however as previously advised to Council, due to a large volume of upgrade works in the wider electrical industry, only one application for appointment to the panel was received. Pricing for each package of works from this sole panel member has been received, with value for money consideration achieved through comparison with an independent engineer's estimate.
- 3.3 Lighting upgrades for the 2020/21 financial year were completed in the locations listed below. Design and construction work costs to complete each package of work is summarised in Table 2.
  - Aberdeen Avenue, Beresford Street, Forbury Avenue, Guy Avenue, Havill Street & Richmond Avenue
  - Dittmer Drive, Ruha Street, Carow Street & Fitchett Avenue
  - Ellesmere Crescent, Cobb Place, Sefton Avenue, Pencarrow Street & Chadwick Place
  - Patea Place

Ruamahanga Crescent and Mokau Place were not completed as planned with Patea Place. These two streets are being implemented in the 2021-22 financial year.



Programme / Street Location	Design costs	Construction Costs	Cost to Complete
Aberdeen Ave, Beresford St, Forbury Ave, Guy Ave, Havill St & Richmond Ave	\$18,000	\$341,238	\$359,238
Dittmer Dr, Ruha St, Carow St & Fitchett St.	\$10,000	\$152,940	\$162,940
Ellesmere Cr, Cobb Pl, Sefton Ave, Pencarrow St & Chadwick Pl.	\$12,000	\$255,084	\$267,084
Patea Place	\$2,000	\$11,890	\$13,890
Designs for projects to be delivered in 2021/22	\$50,848		\$50,848
Totals	\$92,848	\$761,152	\$854,000

#### Table 2: Programme 1367 – Actual Costs for 2020-21 to 30 June 2021

#### 4. PROGRAMME SCOPE AND ESTIMATED COST FOR 2021-22

- 4.1 The programme budget for the 2021-22 year is \$846,000 with detailed design already completed in 2020-21.
- 4.2 Initial estimates for the work have been prepared and are summarised in Table 3 below. Estimates indicate that the budget is sufficient to enable most of the scheduled works to be completed. Officers are anticipating that cost inflation across material supplies may increase pricing for the final package of work being tendered.
- 4.3 Delays in NZTA's decision to withdraw co-funding for this programme over the 2021-24 NLTP period, and Council's subsequent decision to fund the whole programme, have led to a four-month late start to programme delivery. Given this delay, the full programme cannot be delivered this financial year, and an indicative carry forward of \$269,094 from the total \$846,000 budget has been identified for delivery into 2022/23 financial year, although contracted this financial year.
- 4.4 Once tendered pricing for the 2021-22 packages of work has been completed, it will be analysed to assess the impact on budget allocations across the remaining 3 years of the programme delivery over 2022-23 to 2024-25.



Programme / Street	Design costs	Estimated Construction Costs	Total Estimated Cost	Contracted Costs	Current Status	
Ruamahanga Crescent & Mokau Place	\$4,000	\$105,000	\$109,000	\$113,455	Under construction	
(carry forward projects from 2020- 21 financial year)						
Acacia Street, Hilton Grove, Motuoapa Place, Hillcrest Drive, Karamea Crescent, Mahia Place, Rhodes Drive.	\$20,000	\$395,000	\$415,000	\$411,121	Contract Let – start early March 2022	
Cargill Grove, Lyndale Place, Anakiwa Street, Wairau Place, Peter Hall Drive, Colonial	\$18,000	\$300,000	\$318,000	Estimated \$339,424	Designed and plans ready for tender.	
Place, Suzanne Grove, Forbes Place	Note; A carryforward (\$269k) of much of this package is anticipated due to delays in funding & subsequent tendering. Final pricing may also require rescoping of works to fit within budgets*					
Design for construction in 2022- 23.	\$40,000 estimated		\$40,000 estimated	\$40,000 estimated	Locations to be confirmed*	
Totals	\$82,000	\$800,000	\$882,000	\$904 <i>,</i> 000*		

Table 3:	Programmes	1367 – Plan	and Cost Estimate	for 2021-22 Works
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\*Last Street package & design for 2022-23 will be required to be reduced to fit 2021-22 total budget of \$846,000

#### 5. NEXT ACTIONS

- 5.1 Officers are currently focused on delivering the contracted work, working through the tender process for the remaining 2021-22 programme of works, and designs for works in the 2022-23 financial year. Delays in decisions from NZTA on co-funding this programme will see contracted delivery for some of this year's programme carried forward into next financial year, 2022-23.
- 5.2 While the programme budgets appear to be adequate, Officers will continue to monitor costs against budget and identify opportunities to achieve best value for Council.



#### 6. COMPLIANCE AND ADMINISTRATION

Does the Committe	Yes				
Are the decisions sig	gnificant?	No			
If they are significan	nt do they affect land or a body of water?	No			
Can this decision o	nly be made through a 10 Year Plan?	No			
Does this decision Consultative proce	on require consultation through the Special dure?	Νο			
Is there funding in t	he current Annual Plan for these actions?	Yes			
Are the recommen plans?	ndations inconsistent with any of Council's policies or	Νο			
The recommendati	ions contribute to Goal 1: An Innovative and Growing	City			
The recommenda Transport	ations contribute to the achievement of action	n/actions in			
The action is: Prioritise transport programmes that deliver on the Council goals, the purpose of this plan and the Government Policy Statement on Transport					
Contribution to strategic direction and to social, economic, environmental and cultural well- being	Continuation of the infill lighting programme ensures network where lighting has been identified as being are addressed, improving the safety for night-time use	areas of the inadequate ers.			

#### ATTACHMENTS

Nil



#### MEMORANDUM

TO:	Infrastructure Committee
MEETING DATE:	16 March 2022
TITLE:	Road Maintenance Contract Update
PRESENTED BY:	Sandra King, Acting Group Manager Transport & Development
APPROVED BY:	Sarah Sinclair, Chief Infrastructure Officer

#### **RECOMMENDATION(S) TO INFRASTRUCTURE COMMITTEE**

1. That the Committee resolve to receive further six-monthly reports on the work programme and performance of the road maintenance contract.

#### 1. ISSUE

To provide a six-monthly update on the work programme and performance of Council's road maintenance contract.

#### 2. BACKGROUND

On 5 August 2020, the Infrastructure Committee of Council approved the proposed procurement approach for Road Maintenance, Renewal and Capital Improvement Services. The new contract included maintenance, resurfacing, rehabilitation and new capital minor improvement works for road pavements, road drainage, footpaths, street lighting, signage and road marking works. Additionally, a requirement was included that 20 percent of the value of the contract must be delivered by sub-contractors to support small to medium-sized businesses. Traffic counting, bridge assessment and renewals and condition data capture were excluded from the contract.

Following a robust tender process, Council approved the award of tender for 'Contract 3938 Road Maintenance, Renewal and Capital Improvement Services 2021-2024' on 3 March 2021 to Fulton Hogan. The contract commenced on 1 July 2021 and is for a period of 3 years for a sum of \$37,829,440.77 excluding GST, with two further 3 year right of renewal periods.

Reporting on the contract was postponed allowing the establishment phase to occur, which required data collection and planning of works. This report therefore comprises the first six monthly report.



#### 3. CONTRACT PERFORMANCE

#### 3.1 Road Pavement Fault Capture

The new road maintenance contract has focused on the proactive capture of faults across the network and programming repairs based on criticality, i.e. higher volume traffic locations and higher safety risks. Faults have been and continue to be captured through regular road inspections and customer requests for service (refer Figure 1 showing road inspection cycles and customer requests clustered into hotspot areas). Fulton Hogan now have a comprehensive understanding of faults across the network.





Through this understanding, programmes have been and continue to be developed to look at how we wisely invest Council spend in the right areas at the right time. Understanding the issues that customers see on the network and analysing the trends (location and type), assists in implementing network strategies to reduce customer requests over time, noting that there are currently hundreds of K-Base requests for service at any one time that require addressing.

Figure 2 and 3 below provide examples of the network analysis Fulton Hogan are undertaking. Figure 2 shows K-Base requests mapped against inspection cycles to assess whether inspection cycles are being targeted at the right frequency in the right areas. This will be discussed in the committee briefing in more detail.





Figure 2: Location of K-Base requests mapped against inspection cycles

Figure 3 below is a screen shot of Fulton Hogan's 'Archimedes' Programme Builder which takes data from customer requests and inspections logged to build an understanding of jobs, pricing and prioritisation for work programmes. Analysing the number and type of individual jobs over a length of road, can lead to different types of interventions. For example, a high number of customer requests for service that identify numerous potholes over a length of road can lead to a recommendation for heavy maintenance stabilisation rather than individual pothole repairs, as a more cost effective method of maintenance over the long term. Councillor attention is drawn to the element titled 'roads' below, which shows the highest number of service requests on a road-by-road basis.



					- ''							-
Assigned to		Job Summary						Call Types				
Staff Name	Jobs	Fault Description	Jobs	Estimate	Quantity	Ave Size	Ave Open Days	S				
	E.100	3rd party Danage	5		7.55	2.50	97.67	1 15	- Contraction (1997)			
	1.918	AC - Crarked	476	\$49,136.65	8,532.35	17.95	212.01	1 Marca 1/11	9.00	000 00		
	1,300	AC Depression	125		484.20	3.87	209.46					
	753	AC - Lichen / Mess	544	\$3,231,36	47,418,21	87.17	214.93			100 CO	2	
	470	AC - Pothole	440		1,630,52	2.78	215.35	and the second s	O.P.	10 0	-	
	179	AC - Pran Xing Unsutable	761		509.73	3.17	217.85	5 Um	- ARM		1	-
		AC - PRIVATE Fenceline	212	\$2,796,54	2,265.10	10.69	213.00	A. X.	- State			
Tetal	13,082	AC - 70/WATE Tree Roots	221	\$8150.05	2,125.91	9.62	215.21					
		AC - Rabed	122	\$119.30	565.52	4.64	214.72		0 0	a 6 de	- Anna	
Roads		AC. ROMAN	18		\$68.30	\$178	101.62		Contraction of the second	S. S.		inde
Ford	Links C.	AC - Tree Raists	645	\$16,867,91	10.019.22	15.53	21234		000			
normal .	-	AC - Trench	188	\$464.73	660.09	551	215.76	1000	8 0		1000	
COLLEGE ST FEATHERSTON ST	245 220	AC - Whide Xing Umustable	7		10.70	2.67	135.66	1 1 9	📎 🕹			Real
TREMAINE AVE ARGVLE AVE	217 130	AC Pram Crossing Plate Report	1		0.00	0.00	133.00		See.			
VOGEL ST	122	Add Bus stop	8		100	1.00	75.00	Real Property in the second se		- Starts	A	
Total	13,062	Total	13,082	\$7,165,006.05	\$80,698.36	52.72	171.25	* este Azer @Contract. @Council #	Hilas Other Office	or <b>e</b> Nelo <b>e</b> Nelo C. e	fastra - Otar I	Esser.
Programmes		Programme Cate	gories	Priorit	ies		Job D	etails				
Programme	Jobs -	Programme Category	John	1	1		0	Fault Description Road	Start	End Priority	Qty B	Estimate 2
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Figure 3: Fulton Hogan 'Archimedes' Programme Builder Dashboard

#### 3.2 Programme Update

Over the next three years, maintaining and improving the ride quality and comfort for customers across the road network is a key focus area for officers and Fulton Hogan. Using current budgets, officers will focus on pothole repairs, heavy maintenance patching and resurfacing to help keep the seal intact.

From 2024/25 a significant programme of road rehabilitation will be required to address the impact of heavy vehicles. Preparations are underway to develop a targeted programme of renewal work on key arterial routes through the city, including scoping and designs, for the next 10 Year Plan (2024-34) and National Land Transport Plan bid (2024-27 NLTP). This is discussed more in Sections 4 and 5 below.

#### 3.3 Emergency Events and Works

It has been an unseasonably wet summer with 297mm of rainfall since 1 December to 7 February 2022, compared to an historical average of around 100mm. This wet weather has impacted significantly on delivery of planned works, with costs and resourcing spent on responding to flooding and high wind issues and associated clean-up operations.

Proactive maintenance on critical road stormwater drainage, i.e. detritus clean-up on kerbs, sumps and leads prior to storm events, has assisted in reducing the severity of flooding that can occur on parts of the network. However, some unbudgeted work has resulted.

At the beginning of July 2021, a storm event eroded the Turitea Stream near the abutment of the number 2 bridge. Repairs to the embankment to protect the



bridge structure were carried out in December 2021, in liaison with Horizons Regional Council and Rangitane (refer Figure 4).

Figure 4: Turitea Bridge #2 embankment repairs



A significant rainfall event at the beginning of December 2021, while proving the repair works on the Turitea Bridge embankment successful, resulted in a landslip fall across Kahuterawa Road (refer Figure 5). Officers and consultants inspected the site to assess stability, and plan road stabilisation and clean up with Fulton Hogan. The Council's emergency management team assisted with welfare support to several families who were trapped by this landslip overnight, until crews were able to clear the slip material.

#### Figure 5: Kahuterawa Road December landslip





On 13 February 2022 Cyclone Dovi's high winds caused significant tree falls across the road network. Fulton Hogan crews worked quickly alongside Council staff to clear trees blocking roads and footpath networks around the city and continue to assist the council depot during final clean up as required.

#### 3.4 Regular cyclic activities

Regular cyclic activities, including kerb and channel cleaning, sump cleaning, vegetation control, streetlight cleaning as well as road inspections, are being carried out across the network. Programming is based on a comprehensive understanding of the network needs, including analysis of data in our Road Asset Maintenance Management (RAMM) system.

Seasonal weather has impacted the timing of some maintenance interventions, for example, warm wet weather has enabled weeds to flourish across the network requiring additional weed control measures, and impending storm events have increased proactive inspections and remedial work on critical road drainage connections.

Additional cleaning regimes have been implemented following the increased street racing activity across the city, including removal of shredded tyres, litter and fuel spillages from both the road surface, kerb and channel and stormwater drainage grates. Preventative measures are being implemented with varying success including temporary and permanent speed humps. High friction surfacing is under investigation including supply availability.

#### 3.5 Pothole Repairs and Heavy Pavement Maintenance

Unusually wet weather since the beginning of December 2021 has meant that the underlying ground has not had a chance to dry out, and as such, is in a weaker state than normal. This wet weather (along with the asset challenges) has exacerbated the potholes seen developing across the network. This issue is discussed in Sections 4 and 5. Temporary holding repairs continue to be made, with the heavy maintenance programme commencing in March 2022 to provide a more permanent fix through larger dig-out stabilised repairs.

The heavy maintenance programme over March 2022 is focusing on key arterial links including Tremaine Avenue, Pioneer Highway, Airport Drive, JFK Drive and Ferguson Street. A heavy pavement maintenance programme also commenced on Summerhill Drive at the end of February to address the road deterioration, beginning with significant subsurface drainage construction followed by stabilised pavement repairs.

Maintenance work on Railway Road between Tremaine Avenue to the rail overbridge will involve pothole repairs at this stage, with heavy maintenance planned next financial year. A renewal will be needed in the near future to account for the shorter lifespan of the road related to the increase in heavy vehicle use.



#### 3.6 Pavement Resurfacing

Resurfacing work has been held up due to weather and a significant breakdown of the Higgins regional asphalt plant just prior to scheduled maintenance. The resurfacing team began works in February, focusing on resurfacing work on urban low volume and rural roads, followed by high volume sites toward the end of March.

Resurfacing work is occurring this financial year on Birmingham Street, Jickell Street, Limbrick and Phillip Streets, Atawhai Road, Fernlea Avenue, Fairs Road, Roberts Line, Kelvin Grove Road, Cook Street East and West, and Te Awe Awe Street. Design work is also underway for resurfacing work at Ngahere Park Road and Railway Road (between Roberts Line and the roundabout) to protect these roads over the winter period due to high risk of potholes occurring.

Pre-seal repairs are also occurring throughout March 2022 prior to resurfacing, including Roberts Line (stabilisation and service cover lifts), Te Awe Awe Street (mill and fills and service cover lifts), Cook Street (mill and fills) and Kelvin Grove Road (mill and fills and digouts). Texturizing the surface (removing smooth spots) is also being carried out as necessary across the network to support the above resurfacing programme.

#### 3.7 Pavement Renewals

Most of the pavement renewal budget this financial year (2021/22) has been spent reconstructing a structural pavement (deep metal with a deep asphaltic concrete surface) at the Cloverlea Avenue roundabout. This project was highly complicated due to the location of numerous shallow underground services that required extra care while working around them, and significant traffic management required to manage high traffic flows including buses and heavy freight. Unfortunately, delays due to weather experienced in December, combined with an unexpected significant breakdown of the Higgins regional asphaltic plant saw the project completed in February instead of December as planned. Since completion we have had good feedback from the public on the upgrade.





Figure 6: Cloverlea roundabout at Tremaine/Botanical/Gillespies Line

A contribution for pavement renewal work has also been made towards the Pioneer Highway/Amberley Avenue intersection upgrade being constructed as part of the Countdown development project, which is nearing completion.

Further work is discussed in Section 6 below.

3.8 Footpath Maintenance/Renewals and Extensions

Footpath maintenance and renewals (mainly concrete work) across the city are tracking well but behind schedule due to wet weather. Over March, maintenance/renewal works are planned in Highbury Avenue, Park Avenue and College Street, and Ruahine Street (south), with a concerted effort over the next quarter to increase the pace of delivery (subject to weather).

Delays in funding approval through Waka Kotahi for new footpath extension work have put this programme behind schedule by approximately four months. However, new footpath extension works are planned for construction over March for both North and Worcester Streets in Ashhurst, with additional works on Oxford Avenue, Railway Road, Gillespies Line, Hardie Street and Reserve Road to follow. A further package of footpath extensions is currently being scoped and priced.

3.9 Cycle Path Maintenance and Renewals

Removal of detritus for all on road cycle paths across the city is behind schedule. Unforeseen repairs to a specialised cycle path sweeper caused a delay in this programme. With the sweeping unit now back in the city, work began in the middle of February with a clear programme of works now underway.

Maintenance work on the off-street cycle path network is being scoped and priced. This programme includes resurfacing of existing limestone paths, and vegetation and grass control on the shared paths to both Linton and the Mangaone Stream path.



#### 3.10 Minor Safety

Through the road maintenance contract, several road safety improvement projects are also being delivered - mainly raised pedestrian crossings and traffic calming projects that have been approved by Waka Kotahi under Council's road safety programme of works.

Following the completion of the new roundabout at Monrad/Pencarrow/Ronberg Streets at the beginning of this financial year, other improvement works in the Highbury area are now underway. Improvement works have been recently completed on Benmore Avenue, Fairs Road and Havelock Avenue (raised platforms), with raised thresholds at Highbury Avenue/Pembroke Street (for Te Kura O Wairau) and splitter islands on Havelock Avenue planned for completion over March. Raised pedestrian crossings for Takaro School (Brighton Crescent and Highbury Avenue) and Highbury Avenue Shops will follow alongside additional packages of work.

#### 3.11 Unsealed Road Network

Inspections across all the unsealed road network have been undertaken with a focus on pothole repairs and resultant grading and metalling of the network. Roadside drainage and culvert crossings have been focused on to reduce roadside scour and metal loss issues. Fulton Hogan has recommended an intervention strategy for grading rotations of the unsealed road network, which officers are adopting subject to budget affordability.

Custom Street in Ashhurst was focused on early in the financial year because of customer complaints. This exhausted 70% of the road re-metalling budget in correcting the road shape to reduce on-going pothole issues. Repairs to a significant drainage issue causing scour of the road surface at the end of Turitea Road (above the internal road to the city's water reservoir) was undertaken early in the new contract period. Grading work has been undertaken on 80% of the unsealed network where higher traffic volumes also led to customer complaints (Custom Street in Ashhurst, Scotts Road, Kahuterawa Road and North Range Roads). Greens Road has been identified through K-Base to need additional repairs to potholes that have been recently repaired. Full unsealed maintenance grading is planned for Greens Road during March to address other unsealed maintenance issues.

Further work needed is discussed in Section 6 below.

#### 3.12 Covid Impacts and Key Risks

Fulton Hogan have continued to deliver services under Covid19 restrictions, with the traffic light system well integrated into their processes and systems, and onsite risk control plans reflecting different levels and parameters. This may change as community cases of Covid rise across the city. Key risks to delivery involve the uncertainty Covid cases will create for staff availability, difficulty in recruiting staff, supplier cost increases, and long lead in times to secure goods and services,



including parts for equipment and plant. Traffic management resources in the region are also very tight.

While resourcing remains a risk especially with competition for inter-regional resources (eg. delivery of asphaltic concrete work) and recruiting skilled specialist staff, successful staff recruitment has been made across the surfacing, quality assurance, and traffic and transport areas of the business. Subcontractors are generally well resourced, although they do have difficulty recruiting due to the low unemployment rate and availability of alternative work.

Materials supply is being managed and long lead in times are being navigated in the works planning. However, the experienced key risk for the region is accelerated cost of materials and delivery, which caused delays in programmed works over summer, in combination with supply issues from the previous Higgins Asphalt Plant mechanical breakdowns. There is a risk of further supply disruption should a further unplanned breakdown occur. Fulton Hogan is in the process of establishing an Asphalt Plant in the city and has the ability to source asphaltic concrete from their Ohakea based mobile plant.

3.13 Sub-contractor Utilisation

A key requirement of the contract is that 20 percent of the value of the contract must be delivered by sub-contractors to support small to medium-sized businesses. Over the initial 6-month period, the use of subcontractors by Fulton Hogan has continued to increase. Figure 8 below shows the percentage of subcontractor hours worked to end of January 2022. It is expected that costs associated with usage of subcontractors and suppliers will be the same percentage or more against total revenue. Further information can be provided in the next six-monthly report.

Performance of subcontractors is monitored by inspections and audits to confirm the levels of service and compliance.



#### Figure 7: Subcontractor utilisation



#### 3.14 Infrastructure Skills Centre

A value-add initiative by Fulton Hogan has been the development of the Infrastructure Skills Centre, a programme designed to bring youth into the road construction industry, which is supported by Ministry of Social Development, Civil Contractors NZ, the Construction Sector Accord, and Rangitāne and Ngati Kauwhata. To date, three new staff have joined the Fulton Hogan team in Palmerston North through this programme; on 3 December 2021 they graduated with their Level 2 qualifications.

#### 4. ROAD ASSET CHALLENGES

Council's Transport Asset Management Plan 2020 identifies several challenges with the roading network across the city (Section 6.1, Table 6, Transport AMP). The contract is another step in amalgamating and consolidating data about performance alongside real-time condition data to improve our asset management plans and build our understanding of levels of investment needed. The key challenges for road pavements relate primarily to;

- Pavement deterioration on the Arterial and Collector Network
- Poor underlying ground conditions in parts of the city
- Thin existing pavement structures
- Backlog of pavement surfacing, renewal and maintenance

The city sits on a combination of soft alluvial river soils and highly moisture sensitive clays that are susceptible to high water tables during wet periods, which do not provide a strong foundation for the road structure that has been built. Most roads across the city have thin aggregate flexible layers of pavement which are not designed to carry heavy loads. The combination of heavy commercial vehicles, poor underlying ground conditions and thin existing pavements has created the deterioration seen across the road network.

The asset strategy to date has been to stabilise existing thin aggregate pavements, provide smooth asphaltic surfacing, and respond to problems within available budgets, but this allows a long-term deterioration of the network, including rebuilds of the same thin structure. The increase in number and weight of heavy vehicles on these routes has exacerbated the deterioration. A more expensive approach would be to stabilise the soils and deepen the metal layers to cater for existing and future traffic loadings, which would reduce the operational and renewals costs but require higher initial investment.

Resurfacing of the road network is also a critical element to maintenance of road networks; a waterproof layer that helps prevent water getting into the metal layers and soils beneath, to keep the strength of the road. Over time, the bitumen in chip seal surfaces gets brittle and cracks, while the asphaltic concrete surfaces crack under loading conditions, which creates an environment for water to destabilise the road pavement strength. This is exacerbated in Palmerston North by both the



underlying soil movement and the effects of wear and tear from heavy vehicles. Over time, resurfacing programmes have not kept up with need, and there has been a reliance on fixing rather than rebuilding surfaces.

The context of longer term road condition helped set the focus and initial activities for the start of the new Contract.

#### 5. ROAD PERFORMANCE COMPARISON

The Road Efficiency Group (REG) is a collaborative partnership between Local Government New Zealand and Waka Kotahi to nationally share knowledge, improve data collection and insights, become smarter buyers and improve sector performance across transport asset and activity management. A key success of REG has been improvement of data quality through the national Road Asset Maintenance Management system (RAMM) and the insights through a national power BI tool that this brings.

Comparatively our road network has in the past performed well against our peer group. Data sets for the 2020/21 financial year identify that the smoothness of our network overall is good compared to our peer group (refer Figure 8 below).



#### Figure 8: Peer group comparison of smooth travel

The smoothness of roads is a customer outcome measure indicating 'ride quality'. It is an indication of vehicle kilometres travelled on a road network with roughness below a defined upper threshold. The threshold varies depending on the traffic volume and urban/rural environment of the road. Figure 9 below outlines the Smoothness Threshold levels used nationally.



#### Figure 9: Smoothness threshold levels

	Vehicles per day	NAASRA
	< 500	<= 180
Urban	500 - 3,999	<= 150
	4,000 - 9,999	<= 120
	>= 10,000	<= 110
Rural	< 1,000	<= 150
	>= 1,000	<= 130

Whilst this indicates that until recently road maintenance activity has kept up with maintaining the smooth surfaces, it does not give any indication of road lifecycle. When a road reaches the end of its lifecycle, it can deteriorate rapidly. As noted above, the current design approach has led to a short asset life before major rehabilitation is needed.

Therefore, work is progressing on defining future renewals.

#### 6. NEXT STEPS

The data provided by FH has fed into analysis of several work programmes for renewals, increased maintenance, or the need to change maintenance regimes.

A list of pavement renewals required across the city has been identified, with more work than available budget, for example, the renewal cost estimated for Tremaine/Milson upgrade is in the order of \$2m (refer to Table 1 below). Over the next two years (2022/23 and 2023/24) delivery of renewal work will need to be undertaken within the budgets set out in the 2021-31 10 Year Plan and Waka Kotahi's co-funded 2021-24 NLTP programme. Concurrently, officers will be preparing designs and costings for all validated pavement renewal locations to prepare for the 2024-34 10 Year Plan and the 2024-27 NLTP bid. Table 2 outlines the pavement renewal budgets for the 10 Year Plan period.



#### Table 1: Pavement Renewal Validated Locations\*

Indicative Timeframe (budget dependant)	Validated Locations
2022/23	<ul> <li>Tremaine Avenue (Konni-Wood),</li> <li>Ferguson-Pitt Street,</li> <li>Railway Road (west of rail crossing at Bunnythorpe),</li> <li>James Line (Kelvin Grove Road to Schnell Drive)</li> </ul>
2023/24 onwards	<ul> <li>Vogel Street (Tremaine to Featherston),</li> <li>Campbell Road (roundabout to Stoney Creek Road),</li> <li>Kelvin Grove Road (Ashhurst Road to Henaghans Road, incl seal widening and isolated vertical improvements),</li> <li>Stoney Creek Road (rail crossing to Kelvin Grove),</li> <li>Tremaine/Milson intersection,</li> <li>Railway Road (Tremaine to rail over bridge),</li> <li>Tremaine Avenue (Milson to Thames Street),</li> <li>Pioneer Highway (2x sections between Botanical and Amberley),</li> <li>Summerhill Drive (Mountain View Road to Tennent Drive),</li> <li>Turitea Road (SH57 to Valley Views, seal widening),</li> <li>Kairanga-Bunnythorpe Road (rail line to Te Ngaio, dependent on 2x bridge upgrades),</li> <li>Tremaine (Thames Street to Vogel), Francis Way</li> </ul>

\* Sites validated, detailed investigation and design required, renewal projects will depend on budget availability

#### Table 2: Sealed pavement renewal 10 Year Plan budgets

21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
\$2.49M#	\$1.80M	\$1.96M	\$2.40M	\$2.81M	\$3.47M	\$3.57M	\$3.68M	\$3.78M	\$3.89M

# Includes carryforward of \$841k

A significant programme of drainage maintenance (reshaping roadside drains and high shoulder cutting) and culvert repair work has been identified. An analysis of this work within current budget allocations will be provided in the next six-monthly report, the aim of which is to prepare necessary programmes and appropriate budgets for the next 2024-34 10 Year Plan and 2024-27 NLTP bid.

Further six-monthly reports on the work programme, and key risks and performance of the road maintenance contract will be provided to the Infrastructure Committee over the term of the contract.



#### 7. COMPLIANCE AND ADMINISTRATION

Dear the Committe	as have delegated authority to decide?	Voc			
Does the Commun	se have delegated dufficity to decide?	Tes			
Are the decisions s	ignificant?	No			
If they are significa	Int do they affect land or a body of water?	No			
Can this decision o	only be made through a 10 Year Plan?	Yes			
Does this decis Consultative proce	ion require consultation through the Special edure?	Yes			
Is there funding in	the current Annual Plan for these actions?	Yes			
Are the recommer plans?	No				
The recommendat	ions contribute to Goal 1: An Innovative and Growing	City			
The recommended Transport	ations contribute to the achievement of action	n/actions in			
The action is: Develop, maintain, operate and renew the transport network to deliver on the Council goals, the purpose of this plan, and the Government Policy Statement on Transport.					
Contribution to strategic direction and to social, economic, environmental and cultural well- being	This report provides an update to the road m contract delivery programme which addresses the the Transport Plan – to provide an integrated transport network that connects people and g destinations in a safe, efficient and sustainable m evolves to meet new transport demands with less private motor vehicles.	naintenance outcome of multi-modal goods with nanner and reliance on			

#### ATTACHMENTS

Nil



#### MEMORANDUM

TO:	Infrastructure Committee
MEETING DATE:	16 March 2022
TITLE:	Deliverability Planning in response to Covid - Briefing
PRESENTED BY:	Sarah Sinclair, Chief Infrastructure Officer
APPROVED BY:	Heather Shotter, Chief Executive

#### **RECOMMENDATIONS TO INFRASTRUCTURE COMMITTEE**

1. That the Committee notes the update on actions undertaken to date to improve deliverability outcomes due to the impacts of Covid-19 and the resulting increased supply chain risks, particularly focussing on maintaining essential provision of services.

#### **RECOMMENDATIONS TO COUNCIL**

2. That Council note that should rapid approval of contract awards above the Chief Executive's delegation be needed, then an extraordinary meeting of Finance and Audit Committee or Council (depending on level of financial delegation required) will be called.

#### 1. ISSUE

- 1.1 Covid has had some significant impacts on the construction industry across New Zealand. There have been global impacts on production and manufacture of materials and equipment, and the cost and predictability of freight logistics particularly around shipping. There have also been significant constraints on human resources in part because of a major reduction in crossborder travel impacting on the number of migrants with construction and infrastructure related skills. The other reason for constraints in available resources is the high global investment in infrastructure (including NZ) as a recognised economic stimulant as part of COVID recovery. This economic stimulus effect is exacerbated in the Manawatū because of high government investment in infrastructure in the region, coupled with relatively low regional migration.
- 1.2 The various outbreaks of Covid have also led to some unpredictability in the work force and have had impacts on training and on recruitment. In summary, employers are struggling to find and retain skilled staff, there are shortfalls in local material production and there are increasing costs and time delays for materials and equipment from overseas. This makes it very difficult for suppliers to predict commercial outcomes with certainty, especially if there is a supply chain rather than a single supplier.



- 1.3 At the moment, in our tenders we are seeing:
  - an unwillingness to hold prices for some contract elements beyond a few weeks because of the rapid escalation in especially materials and subcontractor rates, e.g. steel reinforcement;
  - long lead times for supply and delivery of some materials and equipment, and requests to exclude programme penalties relating to these;
  - escalating freight costs and time frames, and requests that the Council takes the cost risk on any escalations, and on any programme risk.

All of these are leading to tender tags seeking to shift pricing and delivery risks onto Council. In addition, we are seeing an unwillingness to bid on competitive tenders, especially those of high complexity or low value.

1.4 This paper identifies actions officers are currently taking to identify and mitigate Covid-related delivery risk, and should be read alongside other Deliverability Review work which reflects the deliverable work programme for 2021-22 and 2022-23

#### APPROACHES UNDER CONSIDERATION

#### 2. DELIVERABILITY REVIEW

2.1 The Annual Budget process has undertaken a review of project and programme deliverability against planned budget expenditure. Factors considered include staff resourcing, supplier resourcing (from feasibility through to construction), availability of materials and Covid-related lead in times. Whilst the deliverability review is reported elsewhere, it has informed this paper and is referred to within the paper. It is noted that this is based purely on resource availability at this stage, not on any prioritization that may follow through the annual plan process.

#### 3. SECURING SUPPLIERS

- 3.1 Council already has an in-house delivery team for three waters maintenance and capital renewals. Although wage pressures are consistent with the rest of the market, and wages will need to be raised through the wage review to continue to retain staff, it is noted that maintaining an in-house work force and delivering services in-house provides value and certainty in a highly constrained market.
- 3.2 Council also employs in-house designers and draughters, project managers and contract managers to help deliver predominantly our capital programme. Whilst the in-house resources are supplemented by external supply chain, and staff salary pressures are also consistent with the rest of the market, this in-house capability provides value and de-risks delivery, at a time when there is a nationwide shortage of these skills.



- 3.3 In order to make working with PNCC more attractive to our suppliers, work commenced some time ago on bundling of projects or contracts. Following the examples of the Arena and the Road Maintenance Contract, the following bundled contracts have been developed:
  - Design of 3 waters and transport projects this bundles all external design work to be delivered by a supplier panel of 2-3 suppliers with a local office but national size to secure appropriate skills. This is currently out to tender, for a 3 year contract.
  - Street trees all street tree work has been bundled into 2 contracts covering North and South of the city, and is in the process of being awarded. This work covers a 2 year contract period.
  - Mechanical and Electrical work has been bundled for 3 waters, transport and resource recovery. Tender documents are currently being prepared.
  - Pipe supply at present this contract is annual, and covers supply of all pipes used by our in-house construction teams.
  - Pipe lining a contract has just been let with a bundle of pipe lining works to be delivered via DIA funding.
  - Various other material supply contracts have been developed or updated this year.
- 3.4 Staff are consolidating and bundling programmes for several other types of work including seismic building inspections and various types of asset inspections. These bundles of work will go to the market this financial year and early next financial year.
- 3.5 Some work has been identified as suitable for design and build contracts; this is likely to be trialled this year as a form of bundled delivery.
- 3.6 The Road Maintenance Contract has been successful in securing supply of staff and resources from Fulton Hogan, whilst recognizing that their ability to deliver, similar to the rest of the market, is compromised by Covid 19 impacts. Resources are being allocated by Fulton Hogan to deliver the contract, and this contract offers a facility for direct award of other capital works, as well as maintenance and renewals in the roading space.
- 3.7 Other work in this area relates to more focus in our procurement planning on when an approach to the open market is unlikely to achieve the required outcome. Our procurement strategy requires all decisions to approach 'closed lists' of tenders to be approved at manager level, which continues to be a sound approach. Traditionally, work to develop a closed list has tended to follow an approach of:
  - enquiries to the open market to identify interest in the contract, (expression of interest);



- require suppliers to undertake some sort of prequalification to establish their suitability to deliver the work;
- then approach those successfully prequalified to invite them to tender for the work, potentially with a minor reduction in documentation to reflect information received through the prequalification process.
- 3.8 This is time consuming and runs the risk that contractors who are available at time of expression of interest are not available at time of tender. It also adds time and cost to the contractors' work, which they may choose not to participate in, in a busy market.
- 3.9 As noted above, much of the work that is delivered by PNCC is delivered regularly the complexities tend to be site specific. Therefore, staff are generally aware of who the local suppliers in the market are. It is therefore proposed that, working with procurement, officers will develop short lists of local suppliers to be used for various types of work, based on experience with PNCC to date. These can be published on the internet. By publishing, new entrants to the market (in Palmy) could apply to be put on the list by supplying evidence of experience (including references) in that field. Therefore, work is underway to define and agree this variation to our current procurement approach. This would be implemented next financial year to align with design panel outputs.
- 3.10 Other options currently in use include Direct Award, for example the direct award of Papaeoia Place Stage 3 to the team that had successfully delivered the previous stage.

#### 4. DEALING WITH COST AND DELIVERY RISK UNCERTAINTY

- 4.1 However, not all work is able to be bundled effectively, to secure supply. In many cases work that cannot be bundled has a higher risk profile due to complexity, unique elements or requirements, or being something that we do infrequently as a Council. These contracts are likely to continue to see cost or risk escalations tagged out by suppliers, or shorter acceptance timeframes.
- 4.2 While our role is to ensure risk for Council is managed appropriately, accepting additional risk on current rapid cost escalations will result in a lower cost to Council than compensating the tenderer to accept the costs of these unknown risks. To facilitate this approach requires some changes to our procurement processes and approaches.
- 4.3 The following changes in approach are being considered, in terms of ease of implementation and impact on deliverability.
  - Separating out large 'bespoke' items at procurement planning stage, to specifically plan how to address their sourcing;
  - Separately scheduling 'supply' and 'install' for major work items in our pricing schedules, to allow us to more easily supply some materials as



client, or to bring forward materials ordering easily, for elements with long lead time.

- Accepting offsite materials purchase and storage (with appropriate controls) to allow pre-order and pre-payment. Materials could be stored at Council's depot, provided there were appropriate storage and tracking systems implemented, (e.g. RFID tags to track in / out, etc.).
- Working with other Government / Local Government supply chains, e.g. whether Kainga Ora have stockpiles / secured supply chain for heat pumps.
- Asking in tenders for 'open book' approaches to justifying escalation requests for materials and for subcontractors, where Council is accepting pricing changes from delay risk,
- Identifying suitable alternative materials or equipment (and leaving tenders open to tenderer suggestions for replacements for difficult to source materials or equipment). Work has commenced on this, in terms of investigating local manufacturing options and reviewing 'local' importing options
- Providing more flexibility on programme duration (and associated programme overrun cost recovery), including using more separable portions (which allow for stages to be completed separately), and bundled contracts.
- 4.4 Splitting contracts to separate out major material supply items to be ordered ahead of construction and installation, similar to our pipe supply contract, is being considered more across the sector. However, there are some complexities to resolve, and lessons learnt from others' experience, including:
  - If materials are sourced from off-shore some arrangements for quality assurance to be undertaken prior to shipping.
  - Consideration of whether PNCC buy and store materials or require the Contractor to do so, and where materials could be stored securely.
  - For install-only contracts, how we manage risk of material damage and guarantee / warranty impacts on final constructed item.
  - Contractor expectations of mark-up margins for supplying materials which can be a substantial part of the overall project profit, and how this would affect overall pricing risk.
- 4.5 This work is ongoing, starting with early consideration of bespoke items. All new procurement plans will review bespoke items, overseas materials and other delivery risks, and greater separation of work stages. Work has also commenced on an overall review of storage capacity at Council facilities such as the Depot. Work will commence in April to review our standard contract specifications and schedules.



4.6 The deliverability review of the capital programme has also identified programmes with long lead in times for materials, discussed further in Section 5.

#### 5. OTHER WORK UNDERWAY

- 5.1 Guidance is being developed for staff and suppliers on developing contract documents and for assessing tenders and tags, to ensure we can meet suitable timeframes and allow flexibility. A work programme is being developed, which will be finalised after the April review of our contract specifications and schedules.
- 5.2 As noted in Section 2, the Annual Budget process has resulted in an additional review of our work programme and budget, for the remainder of this financial year and the remaining two until the next LTP process. This has considered what should be moved out in terms of delivery timeframe and market capacity, without compromising our ability to provide services and utilities, and without compromising our Waka Kotahi or DIA funding.
- 5.3 Growth projects (Developer led) have been separated out as timing is affected by developer activity. These projects are seen as good potential candidates for design and build approaches to facilitate timely delivery, and to enable greater cost certainty once triggered, or to design through the design panel to ensure readiness to respond to construction demand early.
- 5.4 The effects of Covid (Delta and Omicron) delayed some of the construction work planned for this year. However, in the main, the delays are a few months and work is likely to be contracted and secured for delivery by the end of the financial year, resulting in carry forwards. The effect of this on market capacity and staff capacity has been considered and some of the FY22-23 work, in capital new, recommended to be deferred to FY23-24.
- 5.5 The bundling of work into delivery contracts will bring increasing certainty about delivery over the next two years. For example, the design panel will ensure that projects are ready for construction tendering, ahead of schedule. This will also help our construction suppliers have more certainty of future work. For that reason, delivery of work in later years is not seen as such a significant risk.
- 5.6 For many renewal budgets, we are likely to see slightly less work delivered for the money spent, because of the cost escalations. Staff have taken a pragmatic view of what can be delivered this year, but moved any delayed delivery budget (approximately 10%) into next year because of the risk of cost escalation, and because renewals are already based on prioritised risk of failure.
- 5.7 Some materials supply, particularly around fleet being purchased from overseas, has been ordered within this financial year.



#### 6. OTHER EMERGING ISSUES AND PROPOSED RESOLUTIONS

- 6.1 At present, our decision making around tenders is long, due in part to the complexity of the work and in part to our processes. At present, tenders are required to remain valid for 3 months, which (as noted above) the industry can be reluctant to do.
- 6.2 The time frame has potential to create issues, if there are time constraints from the tenderers.
- 6.3 Generally, for any reasonably complex contract (generally physical works), post-tender there will be 2-3 weeks of project officer analysis, and queries to tenderers for clarification. Then there will be one or more meetings with the tender evaluation team, potentially followed by more clarification queries to tenderers. Once a preferred tenderer is identified, based on meeting required price and non price attributes, there may be negotiation with the preferred tenderer around price, start date, or any remaining 'tags' which change the specified contractual requirements. We assume a minimum of a month, and ideally 6 weeks, is allowed to identify a recommended contractor.
- 6.4 The holding of prices issue is especially problematic if tenders need to go to Council for approval because of the Chief Executive's level of delegation at \$800,000. For Council approval, after identifying the preferred contractor, the time frame for paper preparation and approval and the timeframe of agenda meetings, committee meetings and Council meetings leaves a lot of time between the required decision being identified and the decision being made – approximately another 6 weeks.
- 6.5 Although the tenders have been written with best knowledge of the supplier at the time, the time taken to approve means that resources may have been allocated to other successful tenders before our decision is made and ratified, resulting in an immediate unanticipated delay in starting work, often with attendant additional costs being identified.
- 6.6 Whilst procuring early to allow time for approvals would also allow the contractor a good lead in time for resourcing, in the current market procuring early will lead to additional cost escalation and hence cost uncertainty.
- 6.7 Therefore, Officers request that Council consider the establishment of a decision-making mechanism for rapid contract awards above the Chief Executive's delegation, such as an extraordinary meeting of the Finance & Audit Committee or Council (depending on level of financial delegation required).

#### 7. NEXT STEPS

- 7.1 Work will continue on deliverability risk mitigations.
- 7.2 A progress report will be presented to the Infrastructure Committee in 6 months.



#### 8. COMPLIANCE AND ADMINISTRATION

Does the Committee have delegated authority to decide? No				
Are the decisions s	Yes			
If they are significa	No			
Can this decision c	only be made through a 10 Year Plan?	No		
Does this decision require consultation through the Special Consultative procedure?				
Is there funding in t	the current Annual Plan for these actions?	Yes		
Are the recommer plans?	ndations inconsistent with any of Council's policies or	No		
This paper addresses how officers are addressing the changing market conditions by varying our approach to procurement, in line with the procurement policy, which allows Unit Managers to make and document such decisions.				
The recommendat	ions contribute to Goal 1: An Innovative and Growing	City		
The recommendations contribute to the achievement of action/actions in Transport				
The action is: Develop, maintain, operate and renew the transport network to deliver on the Council goals, the purpose of this plan, and the Government Policy Statement on Transport.				
Contribution to strategic direction and to social, economic, environmental and cultural well- being	Undertaking a deliverability review has helped Cou obstacles and consider challenges underpinning wellbeing in the current supply and construction envi	Jncil identify economic ironment.		

#### **ATTACHMENTS**

Nil



#### **COMMITTEE WORK SCHEDULE**

TO: Infrastructure Committee

MEETING DATE: 16 March 2022

TITLE: Committee Work Schedule

#### **RECOMMENDATION(S) TO INFRASTRUCTURE COMMITTEE**

1. That the Infrastructure Committee receive its Work Schedule dated March 2022.

#### ATTACHMENTS

1. Committee Work Schedule - March 2022 👲 🛣



INFRASTRUCTURE COMMITTEE

# **COMMITTEE WORK SCHEDULE – MARCH 2022**

шĸ	stimated eport Date	Subject	Officer Responsible	Current Position	Date of Instruction/ Point of Origin
<del>March 2</del> 0;	77	Roading Maintenance Contract (6 monthly)	<del>Chief Infrastructure Officer</del>	Contract commenced in July 2021 so it is in the initial stage. Reports to be made in November 2021 and June 2022.	
<del>March 2</del> (	55	Update on infill lighting required to achieve compliance in P and V categories	<del>Chief Infrastructure Officer</del>		<del>2 September 2020</del> Clause 28.2
<del>March</del> May 202'	5	Memorial Park – Final Implementation Report	Chief Infrastructure Officer	The splash pad has only been up and running for a short period of time. The team will be running a 'lessons learnt' session with an external provider at the end of March 2022, reporting on this in May 2022.	Play, Recreation & Sport 24 February 2021 Clause 8-21
May 202	2	Annual Footpath and Pathway Report	Chief Infrastructure Officer		Committee of Council 9 June 2021 Clause 28.27-21
<del>March 2</del> August 2	<del>022</del> 2022	Streets for People Update (6 monthly)	Chief Infrastructure Officer	Update on Streets for People Programme 2122 was provided to	

Oasis # 13990155

	Committee of Council 9 June 2021 Clause 28.29-21
Council on 20 December 2021.	
	Chief Infrastructure Officer
	Feasibility of siting a Chinese Garden within the Victoria Esplanade
	2022
	6.

**ITEM 12 - ATTACHMENT 1**